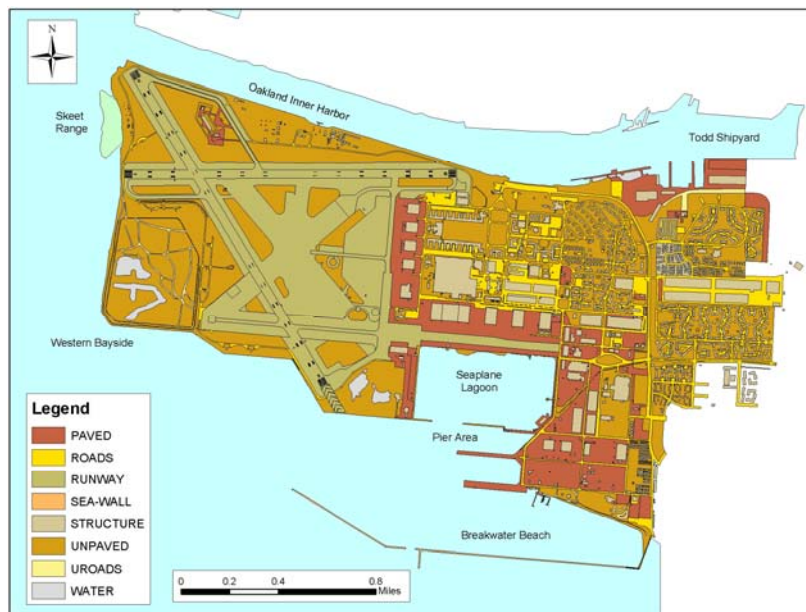


FINAL

Record of Decision Skeet Range

Alameda Point, Alameda, California



Prepared for:

**SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
1220 Pacific Highway
San Diego, CA 92132**



Prepared by:

Battelle

The Business of Innovation

**397 Washington St.
Duxbury, MA 02332**



**Contract No. N47408-01-D-8207
Project No.: G486085**

September 2005

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September 19, 2005

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ATTACHMENTS

Attachment A	Site Specific Administrative Record Index
Attachment B	Agency Agreement Letters
Attachment C	Transcript of Public Meeting and Comments Received on the Proposed Plan
Attachment D	List of Attendees, Proposed Plan Public Meeting, March 7, 2005
Attachment E	Public Notices

ABBREVIATIONS AND ACRONYMS

ARAR	applicable or relevant and appropriate requirements
ARRA	Alameda Reuse and Redevelopment Authority
AWQC	ambient water quality criteria
BERA	baseline ecological risk assessment
BRAC	Base Realignment and Closure Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Act Information System
cm	centimeter
cm/yr	centimeters per year
CNO	Chief of Naval Operations
COPC	chemicals of potential concern
CSM	conceptual site model
DON	United States Department of the Navy
DTSC	Department of Toxic Substances Control
EPA	United States Environmental Protection Agency
ERA	ecological risk assessment
ER-L	effects range-low
ER-M	effects range-median
FFA	Federal Facilities Agreement
FS	feasibility study
ft	feet
FWS	United States Department of the Interior Fish and Wildlife Service
HPAH	high molecular-weight PAH
ID	identification
IR	installation restoration
LPAH	low molecular-weight PAH
m	meter
MLLW	mean lower low water
NAS	Naval Air Station
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NEESA	Naval Energy and Environmental Support Activity
NOAA	National Oceanic and Atmospheric Administration
NOAEL	no observed adverse effects level

OU	operable unit
PAH	polycyclic aromatic hydrocarbon
PCA	principal component analysis
PRC	PRC Environmental Management, Inc.
RAB	Restoration Advisory Board
RAP	Remedial Action Plan
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
RI	remedial investigation
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
TPH	total petroleum hydrocarbons
TtEMI	Tetra Tech EM, Inc.
USACE	United States Army Corps of Engineers
UTL	upper tolerance limit

DECLARATION

SITE NAME AND LOCATION

This decision document addresses the former Skeet Range (Installation Restoration [IR] Site 29) at the former Naval Air Station (NAS), now referred to as Alameda Point, in Alameda, California. The U.S. Environmental Protection Agency (EPA) Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS) identification (ID) number is CA2170023236.

STATEMENT OF BASIS AND PURPOSE

This Record of Decision (ROD) presents the selected remedy, no further action, for the former Skeet Range (IR Site 29), in Alameda, California.

This document was developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended by Superfund Amendments and Reauthorization Act (SARA) of 1986 (Title 42 United States Code Section 9601, et seq.), and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (Title 40 Code of Federal Regulations Part 300).

This decision is based on information contained in the administrative record file (a site-specific administrative record index is included as Attachment A) as well as on extensive field investigations, laboratory analyses, interpretation of the data, review of current and future conditions, and thorough assessment of the potential human health and ecological risks. Based on these findings, there are no land use restrictions, environmental monitoring, or Resource and Recovery Act (RCRA) corrective action required at the site.

The U.S. Department of the Navy (DON), the San Francisco Regional Water Quality Control Board (RWQCB), the state of California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), and the U.S. EPA concur on the selected remedy for this site. Agreement letters from the U.S. EPA, DTSC and the RWQCB are included as Attachment B.

ASSESSMENT OF THE SITE

The DON has concluded that remedial action is not required to protect public health or the environment on the basis of the following:

- site histories;
- field investigations;
- laboratory analytical results;
- evaluation of potential ecological and human health risks;
- current and reasonable anticipated future land use.

Results of investigations at the Skeet Range (IR Site 29) have verified that current and reasonably anticipated future land uses at the site do not pose a risk to human health or the environment. The human health risk assessment indicated that there are no complete pathways in which humans would be exposed to site-related contaminants of concern. Similarly, the ecological risk assessment concluded that there are no unacceptable ecological risks associated

with the sediments offshore of the former Skeet Range and that the ecological community is not impacted.

STATUTORY DETERMINATIONS

The DON has concluded that no remedial action is necessary at the site because the current and reasonably anticipated future land use and likely future use of the site is protective of human health and the environment and complies with federal and state requirements. A five-year status review will not be required because: 1) this remedy will not result in hazardous substances, pollutants, or contaminants remaining on-site at levels above those that allow for unlimited use and unrestricted exposure, and 2) as a result, a remedial action was not necessary or selected in this ROD.

AUTHORIZING SIGNATURES



Thomas L. Macchiarella
Base Realignment and Closure Environmental Coordinator
Navy Base Realignment and Closure Program Office West
Department of the Navy

9-30-2005

Date



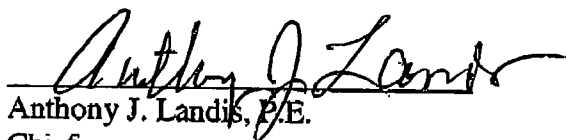
Kathleen Johnson
Chief, Superfund Federal Facility and Site Cleanup Branch
U.S. Environmental Protection Agency, Region IX

9/21/05

Date

**Non- FFA Signatory
Regulatory Agency Signatures**

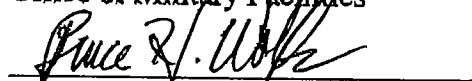
The following signatures indicate that these regulatory agencies have reviewed this document and their comments have been addressed.



Anthony J. Landis, P.E.
Chief
Northern California Operations
Office of Military Facilities

9-26-05

Date



Bruce H. Wolfe,
Executive Officer
San Francisco Regional Water Quality Control Board

9/22/05

Date

BRAC OFFICE

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1.0 SITE NAME, LOCATION, AND DESCRIPTION

This Record of Decision (ROD) presents the determination by the Department of the Navy (DON) that no remedial action is necessary at the former Skeet Range (Installation Restoration [IR] Site 29) at the former Naval Air Station (NAS), now referred to as Alameda Point, in Alameda, California. This ROD satisfies the Department of Toxic Substances Control (DTSC) requirements for a Remedial Action Plan (RAP) for hazardous substance release sites pursuant to California Health and Safety Code Section (§) 25356.1.

This document was developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended by Superfund Amendments and Reauthorization Act (SARA) of 1986 (Title 42 *United States Code* Section [§] 9602 *et seq.*), and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (Title 40 *Code of Federal Regulations* § 300 *et seq.*). The decision for this site is based on information contained in the administrative record file (a site-specific administrative record index is included as Attachment A) as well as on extensive field investigations, laboratory analyses, interpretation of the data, review of current and anticipated future conditions, and thorough assessment of the potential human health and ecological risks. Based on these findings, there are also no land use restrictions, environmental monitoring, or Resource and Recovery Act (RCRA) corrective action required at the site.

1.1 Site Name

This decision document addresses the former Skeet Range (IR Site 29) at the former NAS, now referred to as Alameda Point, in Alameda, California.

1.2 Site Location and Description

The former Skeet Range (IR Site 29) is located on the northwestern corner of the former NAS (see Figure 1), now referred to as Alameda Point, in Alameda, California. The Skeet Range (IR Site 29) extends offshore into the San Francisco Bay with dimensions of about 1,300 feet (ft) by 800 ft. The primary site-related contaminants (lead shot and polycyclic aromatic hydrocarbons [PAHs] from the clay targets) are located approximately 80 ft offshore, in water depths averaging 5 ft or greater. Figure 2 depicts Alameda Point in relation to San Francisco Bay.

1.3 Lead and Support Agencies

Since 1993, the Alameda Point Base Realignment and Closure (BRAC) Cleanup Team (BCT) has coordinated cleanup and closure activities for Alameda Point to support the transfer and redevelopment of the offshore property by the Alameda Reuse and Redevelopment Authority (ARRA). The BCT consists of representatives from the Navy, U.S. EPA Region 9, DTSC, and California Regional Water Quality Control Board (RWQCB). The DON is the lead agency for environmental restoration at the site and U.S. EPA is the lead regulatory agency providing oversight. A Federal Facility Agreement (FFA) between the DON and U.S. EPA was signed on July 5, 2001. The FFA defines the DON's corrective action and response obligations under RCRA and CERCLA.

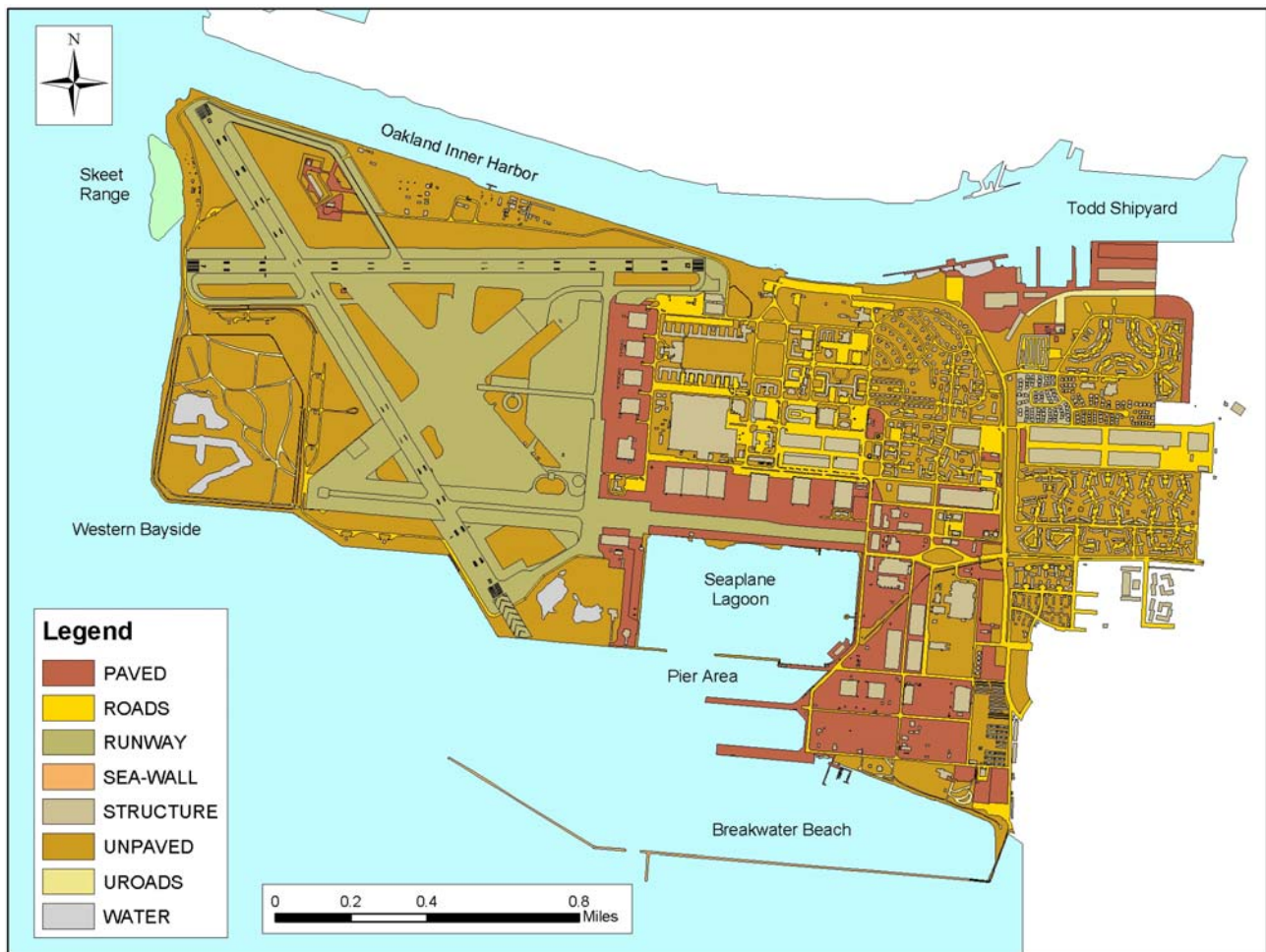


Figure 1. Site Map of Alameda Point

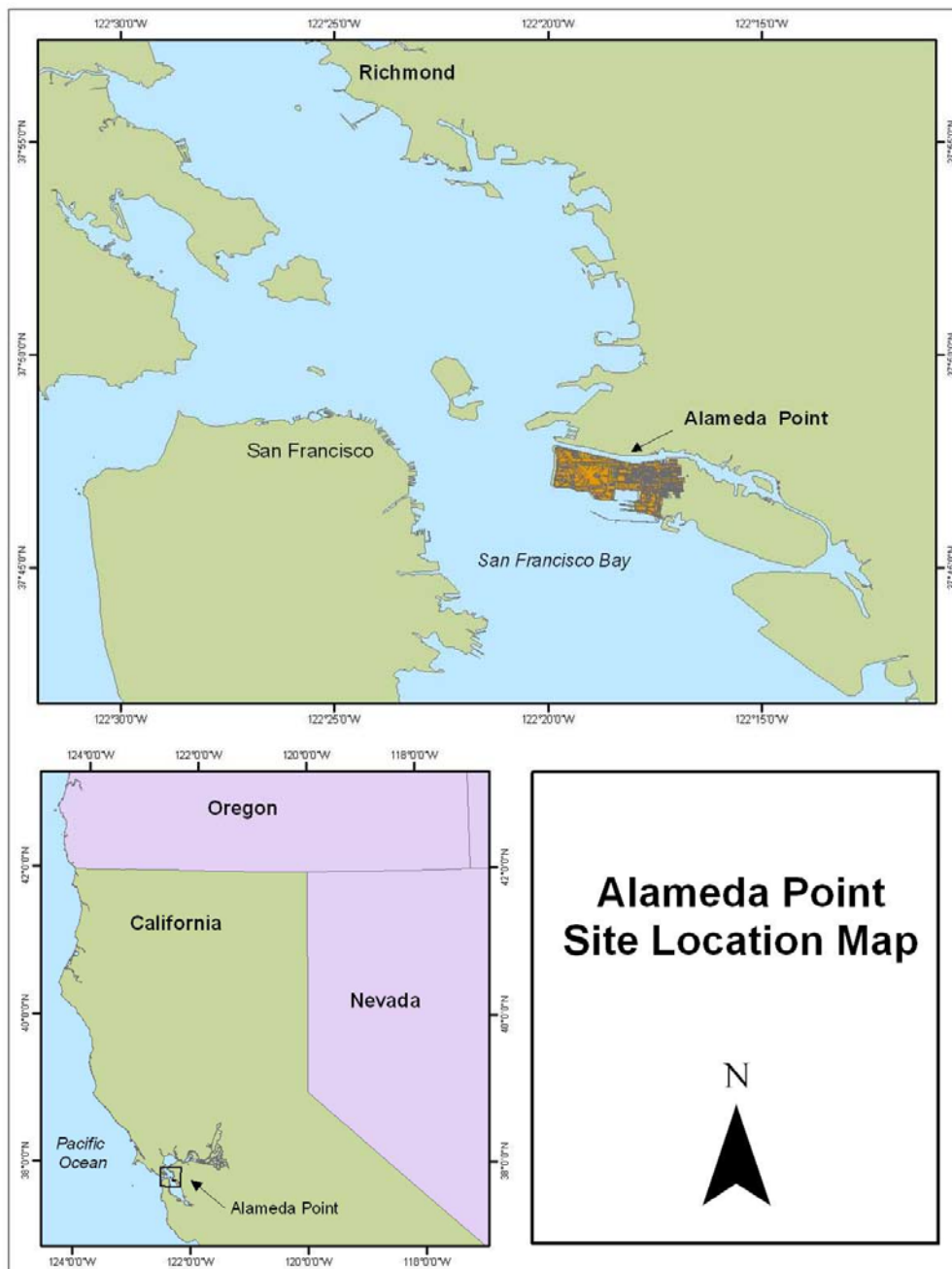


Figure 2. Alameda Point Site Location Map

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2.0 SITE HISTORY AND INVESTIGATION ACTIVITIES

Historically, the Skeet Range consisted of two main shooting ranges (northern and southern) that were actively used for 30-40 years until their closure in 1993. Lead shot were discharged from guns toward clay pigeon targets projected westerly over San Francisco Bay. As a result, lead shot and clay target fragments reside in the sediment adjacent to the Skeet Range (IR Site 29), concentrated in an area located 80 ft offshore in average water depths ranging from 5- to 12-ft deep. The clay pigeon targets were bound together with petroleum products that contain PAHs. Based on these historical activities, concerns were raised about possible adverse effects to humans and wildlife resulting from exposure to lead and PAHs in the offshore area.

The Skeet Range was initially identified as a specific area of concern based on the results of sediment sampling conducted as part of the 1994 Ecological Assessment for former NAS Alameda. One of five study areas evaluated in the Ecological Assessment was Western Bayside, a region of open bay water adjacent to the northern and western edges of the former NAS Alameda. Of the 13 Western Bayside sample stations, two were located within the Skeet Range (IR Site 29) study area (i.e., Stations B03 and B04) and confirmed the presence of lead shot and PAHs. Additional sampling and analysis was conducted in 1996 as a follow-on to the draft Operable Unit (OU) 4 (Western Bayside) Ecological Risk Assessment (ERA) (PRC, 1996) and in 1998 as a part of the *Ecological Assessment of the Alameda Point Skeet Range Area* (TtEMI, 2000). A summary of these investigations, which led to the designation of the Skeet Range as an IR site in August 2000 during the development of the Site Management Plan for the Federal Facilities Agreement (FFA), is provided below.

1996 OU4 Ecological Assessment

Based on the results presented in the 1994 Ecological Assessment, PRC (subsequently called TtEMI) performed additional sampling and analysis as follow-on to the draft *OU 4 Ecological Risk Assessment* (PRC, 1996). Initially, a full reconnaissance of the site was performed where grab samples were collected every 45 ft along five transects (A through E) covering an angle of 90 degrees outward from each of the two (northern and southern) shooting ranges (Figure 3). The transects from each range were labeled A through E in a north to south direction from their point of origin (N-A through N-E in the northern shooting range, S-A through S-E in the southern shooting range). The approximate origin of each transect corresponded to the shooting stand of each range, and extended out to a distance of roughly 1,000 ft. Grab samples were sieved and weighted for lead shot and used to determine the approximate spatial distribution (i.e., fall zone) of lead shot over the site. Using the distributions, a series of arcs representing contaminant distribution were established for the northern and southern regions of the Skeet Range, which were used to develop the sampling plan. These arcs represented:

- The region of the Skeet Range at which shot density was greatest (middle arc)
- The inshore boundary of the Skeet Range at which shot density decreases (inner arc)
- The offshore boundary at which shot density decreases (outer arc).

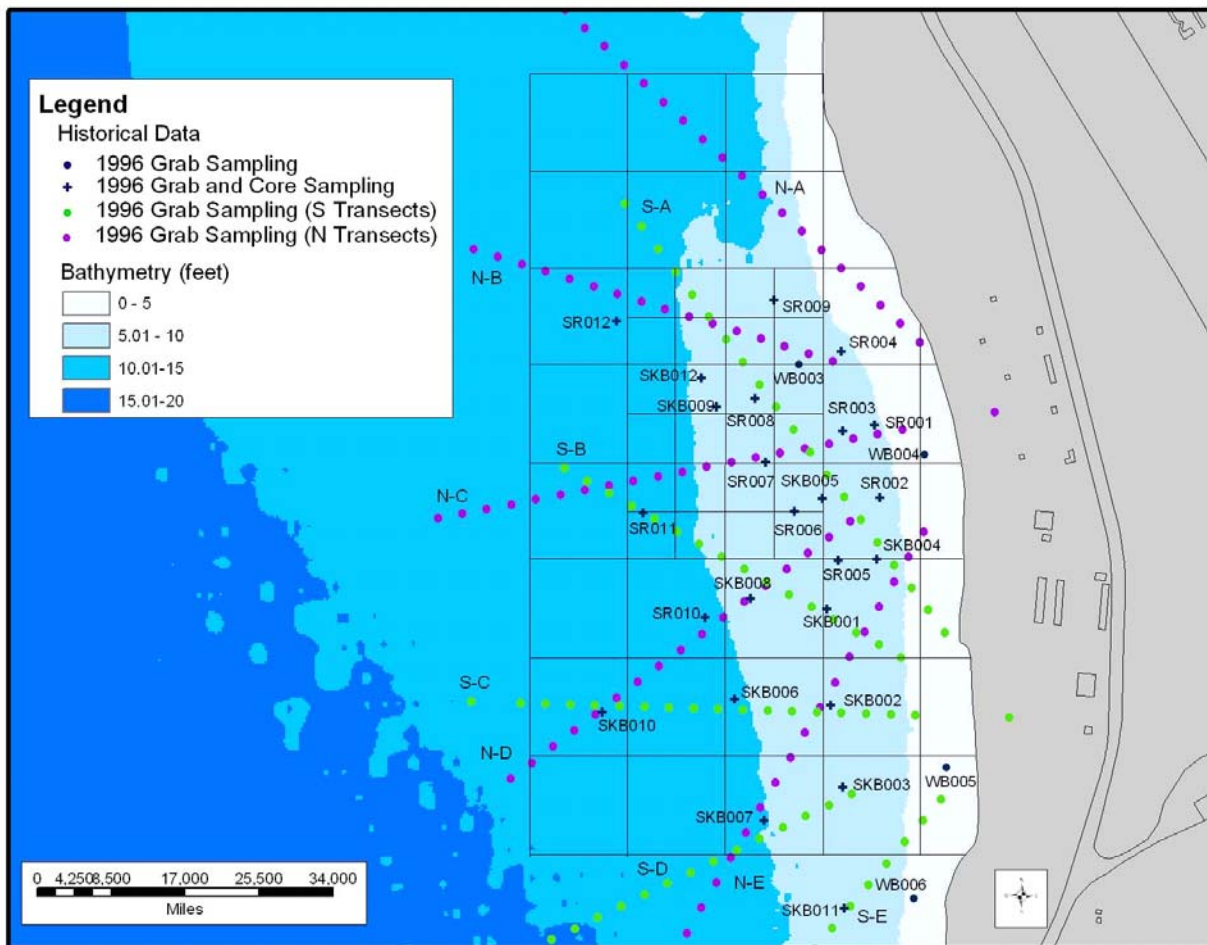


Figure 3. Sampling Stations from Collection Efforts in 1996

Based on the results of the field reconnaissance, 12 sediment core locations were sampled from select stations in the northern and southern ranges. Samples were analyzed for lead and PAHs to characterize the vertical extent of contamination. The data collected from these samples are presented in the *Chemical Data Summary Report for Offshore Sediment* (TtEMI, 1998).

1998 Supplemental Sampling

In 1998, additional sediment core samples were collected at the Skeet Range (IR Site 29) to further delineate the distribution of lead shot found at depth (TtEMI, 2000). Based on the 1996 investigation, the area of maximum lead shot density was located in the vicinity of sampling location SKB009 with decreasing density extending 10 acres from the shooting ranges. Ten sediment core samples were randomly collected from this area of highest lead shot density (see Figure 4). Only lead and PAHs were identified as constituents of concern based on the historical activities at the site.

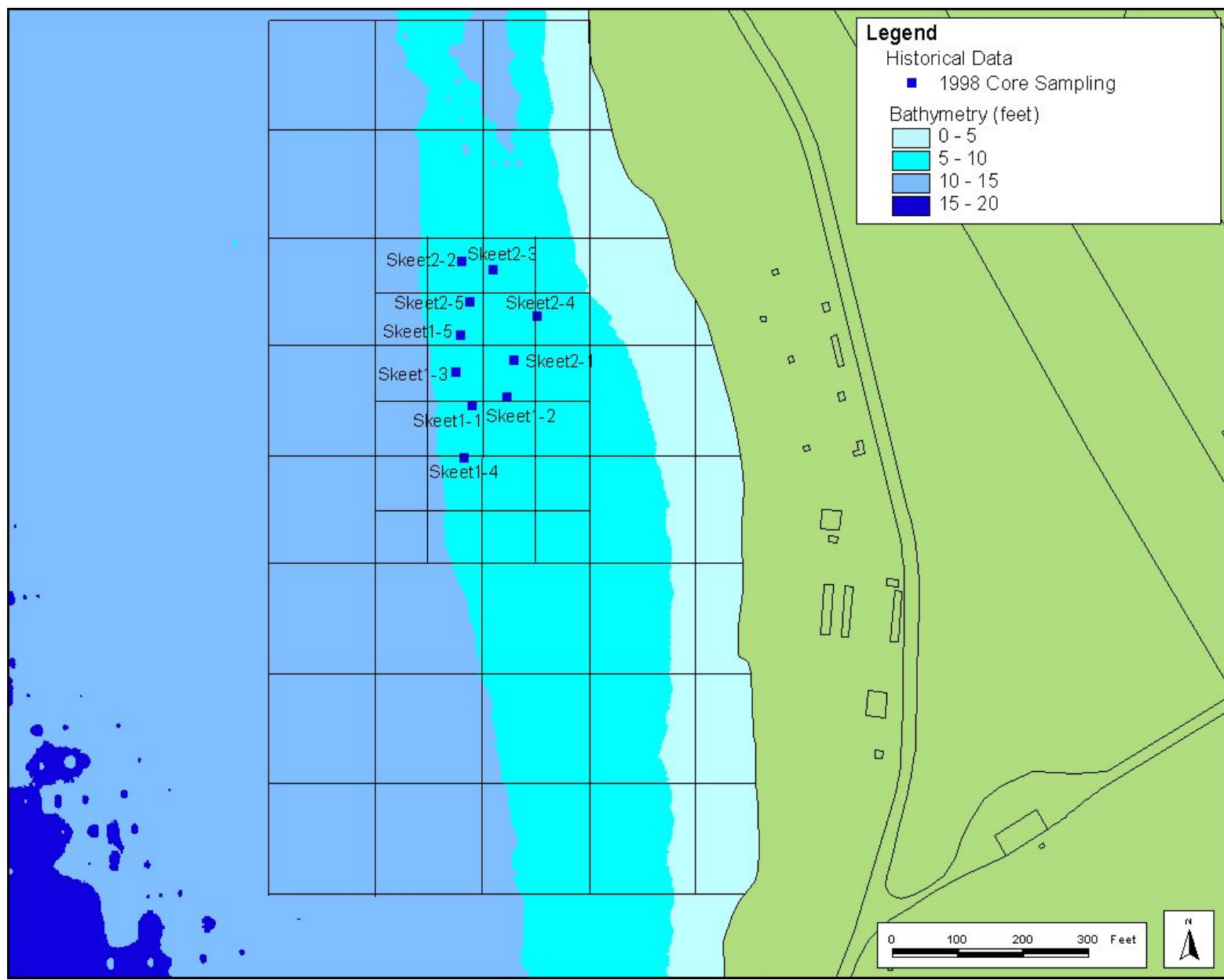


Figure 4. Sampling Stations from Collection Efforts in 1998

Results of the lead shot depth distribution analysis showed that the concentration of lead shot generally increases with depth to about 20 centimeters (cm), with maximum concentration occurring between 4 and 20 cm. Lead shot was not detected in the 40- to 45-cm depth interval, indicating that the shot only occurs in the top 0.5 meter (m) of sediment. Lead shot was not typically found in the top 4 cm of sediment, suggesting that settling and sedimentation are leading to shot burial.

Ecological Assessment

The 1996 study results were integrated with the 1998 investigation and presented in the *Ecological Assessment*, which was submitted to the BCT on February 20, 2000 (TtEMI, 2000). Based on the 1996 investigation, density of lead shot was highest in the area that overlaps the two shooting ranges. The study also included an investigation of the degree of dissolution of lead in sediment and porewater from lead pellets to determine if lead dissolving from the shot is biologically available. The results indicated that lead from the lead shot is not dissolving in quantities that would be considered to be biologically of concern based on ambient water quality criteria (AWQC) and is not present at concentrations that could cause adverse ecological effects (TtEMI, 2000). Therefore, additional investigations focused on exposure to PAHs and to the lead shot.

PAH concentrations from sediment and porewater were also compared against San Francisco Bay reference stations and to toxicity benchmarks, specifically the effects range-low (ER-L). Although some PAH compounds were found to exceed ER-Ls, the data show that the concentrations of total PAHs found in the Skeet Range are comparable to concentrations measured from ambient locations. Concentrations within the Skeet Range either are relatively uniform with depth or (in several locations) increase with depth. Maximum concentrations of PAHs in some samples were found at depths greater than lead shot, suggesting that clay targets or Skeet Range (IR Site 29) activities might not be responsible for the PAHs found in sediment.

Incorporating the results from both the 1996 and 1998 investigations, the *Ecological Assessment* (TtEMI, 2000) concluded that the bulk and dissolved concentrations of lead and PAHs are below AWQC and reflect ambient concentrations. In addition, the *Ecological Assessment* (TtEMI, 2000) suggested, based on the lead shot depth distribution, that sediment was accumulating and burying the lead shot, rendering it unavailable for diving birds and that PAHs within the study area might not be attributable to historical site operations.

The RWQCB identified several significant concerns regarding the conclusions of the *Ecological Assessment*. Specifically, the RWQCB disagreed with the finding that levels of lead and PAHs in sediments were within the range of ambient concentrations. The RWQCB also expressed concern about the relevance of applying results from the United States Army Corps of Engineers (USACE) sediment accumulation studies to the Skeet Range (IR Site 29). Finally, the RWQCB disagreed with the low significance of exposure and risks to diving birds from ingestion of shot as stated in the ERA. To address these concerns, the DON conducted a field investigation in November 2001 to further characterize the spatial extent of lead shot distribution, determine the source of the PAH contamination, and develop sediment depositional rates.

2001 Skeet Range Site Evaluation

The primary objectives of the 2001 evaluation were to: 1) further define the lateral and vertical extent of lead shot in sediments to determine the potential for exposures to human and ecological receptors; 2) evaluate the extent of vertical mixing of lead shot based on the sedimentation rate; and 3) determine if PAHs present at the site are associated with fragments of the clay pigeon targets. To achieve these objectives, 40 surface sediment samples and 25 sediment cores were collected within the area and analyzed for lead shot and PAHs. Samples were evaluated to determine the vertical distribution of lead shot throughout the sediments. In addition clay target fragments were collected from the sediment and analyzed to determine the PAH composition for comparison to the PAHs present in sediments. The results of this field investigation were presented in the 2004 Remedial Investigation (RI) Report (Battelle et al., 2004).

Remedial Investigation

The primary objectives of the RI report were to evaluate the offshore sediment quality at the Skeet Range (IR Site 29) to identify areas of unacceptable risk based on the human health and ecological risk assessments conducted using the data collected from the 2001 field effort. Adjacent onshore and nearshore areas will be addressed as part of the IR Site 1 investigation and through evaluation of Western Bayside as described in the Offshore Sediment Core Study Workplan (Battelle, 2005; Battelle et al., 2005). The RI focused on PAHs and lead shot as the primary chemicals of potential concern (COPCs). Based on the RI it was concluded that:

- PAH concentrations in sediment were chemically distinct from PAHs found in clay targets. This result indicates that abrasions or leaching of any organic binder from clay targets was not the source of hydrocarbons in sediment, including PAHs.
- The estimated net sediment accumulation rate was estimated to be between 0.65 and 1.0 centimeters per year (cm/yr). The horizontal and vertical distribution of shot supports the hypothesis that lead shot has not been transported significant distances and that gradual burial is occurring.
- Risks to ecological receptors were low based on potential exposures to lead shot and PAHs.
- The human health conceptual site model (CSM) indicated that there were no complete direct exposure pathways based on current and proposed future land uses. Indirect exposures to PAHs through fishing or clamming may be possible; however, no evidence has been found which suggests that PAHs biomagnify and bioaccumulate in the environment. In addition, the data indicate that the PAHs in sediments are primarily associated with background sources.

Based on the ecological and human health assessments, no unacceptable risks are associated with exposures at the Skeet Range. Because the PAH levels are indicative of background levels and the majority of the lead shot is being gradually buried, exposures to sediment do not pose a health threat to current or future human receptors and the environment. Consequently, a no further action determination was recommended for this site. Based on the conclusions of the RI and the recommendation of no further action, there were no sediments proposed for further evaluation in a Feasibility Study (FS), therefore, an FS was not completed.

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3.0 HIGHLIGHTS OF COMMUNITY PARTICIPATION

A Restoration Advisory Board (RAB) was established for Alameda Point to give community members an opportunity to participate in environmental restoration activities at Navy facilities. The Board is co-chaired by a community member and a representative from the DON. Other Board members include representatives from the U.S. EPA, San Francisco RWQCB, DTSC, the general public and the Sierra Club.

RAB meetings are held monthly in Alameda and are advertised in local newspapers. They are devoted to environmental restoration activities throughout the entire Alameda site. A number of RAB meetings have had discussions devoted to investigation activities at the former Skeet Range (IR Site 29). As a result, the public has had opportunities to review and comment on the RI Report (July, 2004) and the Proposed Plan (February, 2005). The notice of availability of these two documents was published February 11, 2005 in the Oakland Tribune and Alameda Journal. In addition, a public meeting regarding the Proposed Plan was held on March 7, 2005 in Alameda, CA. A transcript of the meeting is included in Attachment C. The public comment period for the Proposed Plan extended from February 15, 2005 to March 18, 2005. Copies of each report can be found in the administrative record file and at the information repositories maintained at:

Alameda Point
950 West Mall Square
Building 1
Alameda, California

Alameda Public Library
2200 A Central Ave
Alameda, California

The DON's response to public comments received during the Proposed Plan comment period is included in Section 10, the Responsiveness Summary.

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4.0 SCOPE AND ROLE OF RESPONSE ACTION

The former NAS at Alameda Point encompasses 35 IR Sites (IR Site 18 was removed from the program). IR Site 29 is located at the western boundary of the facility just offshore of IR 1 (see Figure 5). IR Site 1 was a disposal/landfill area that is located east of the range and was historically part of the open bay until fill materials were deposited from the early 1940s to 1956 (PRC, 1996). IR Site 1 is being addressed independently from IR Site 29 and will address the adjacent shoreline and nearshore areas (Battelle, 2005). In addition, although not identified as an IR site, the area along the western and southern edge of Alameda Point, referred to as Western Bayside, will be evaluated in a Data Summary Memorandum as described in the Offshore Sediment Core Study Work Plan (Battelle et al., 2005).

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5.0 SITE CHARACTERISTICS

This section briefly describes the physical characteristics of the Skeet Range (IR Site 29) and the nature and extent of contamination at the site.

5.1 Site Overview

As previously described, the former Skeet Range (IR Site 29) is located on the northwestern corner of the former NAS Alameda (see Figure 1). The Skeet Range extends to approximately 800 ft offshore into the San Francisco Bay with dimensions of about 1,300 ft by 800 ft. The area is exposed to wind and wave action from San Francisco Bay (TtEMI, 2000). Based on a current bathymetry map of the Skeet Range from 2001 acoustic imaging, the bottom of the range is a broadly uniform, gentle slope with water depths ranging from <5 ft (<1.5 m) to about 12 ft (3.7 m). The majority of the Skeet Range fall zone is 80 ft offshore in water between <5 to <10 ft (1.5 to 3 m) deep. The adjacent onshore area consists of fill material dredged from San Francisco Bay coastal mudflats, marshlands, and sloughs in the 1930s and 1940s. The onshore area has relatively flat topography and most of the shoreline is lined with riprap and former concrete ramp. No significant streams, rivers or other surface water bodies discharge into the bay in the vicinity of the Skeet Range.

5.2 Nature and Extent of Contamination

As described in Section 2, the primary COPC associated with activities at the Skeet Range (IR Site 29) are lead shot and PAHs potentially associated with the clay target fragments.

Based on the investigations conducted in 1996, 1998, 2000, and 2001 it has been demonstrated that the density of lead shot is highest in the area that overlaps the two shooting ranges. Lead from the lead shot is not dissolving in quantities that would be considered to be biologically of concern based on AWQC and is not present at concentrations that could cause adverse ecological effects (TtEMI, 2000). Vertically, the concentration of lead shot generally increases with depth to about 20 cm, with maximum concentration occurring between 4 and 20 cm. Lead shot was not detected in the 40- to 45-cm depth interval, indicating that the shot only occurs in the top 0.5 m of sediment. Lead shot was not typically found in the top 4 cm of sediment, suggesting that settling and sedimentation are leading to shot burial. A radioisotope study of the area estimated a sediment accumulation rate of between 0.65 and 1 cm/yr, confirming that the majority of lead shot at the site are likely to be buried below 5 cm.

As part of the 1996 investigation, PAH concentrations from sediment and porewater were compared against risk-based sediment screening benchmarks, i.e., ER-Ls and ER-Ms (Long et al., 1995); and to San Francisco Bay ambient upper tolerance limits (UTLs) for sediments of <100% fines (RWQCB, 1998). In general, concentrations of total PAHs found in the Skeet Range (IR Site 29) are comparable to concentrations measured from ambient locations. In addition, only three stations along the northern edge of the Skeet Range (IR Site 29) had concentrations above the risk-based screening benchmarks. Concentrations within the Skeet Range (IR Site 29) either are relatively uniform with depth or (in several locations) increase with depth. Maximum concentrations of PAHs in some samples were found at depths greater than

lead shot, suggesting that clay targets or Skeet Range (IR Site 29) activities are not responsible for the PAHs found in sediment. As part of the RI, PAH fingerprinting techniques were employed to characterize the unique signature of PAH constituents within the clay target fragments in comparisons to measured levels of PAHs in sediment. The chemical composition of sediment and fragment samples were then evaluated using a Principal Component Analysis (PCA), which groups chemical similarities or differences, without any preclassification as to their nature/source(s). The PCA revealed that nearly all of the sediment samples were chemically distinct from the chemical composition of clay target fragments, which led to the conclusion that the organic binder in clay fragments was not the source of PAHs in the sediment at the site.

6.0 CURRENT AND POTENTIAL FUTURE LAND AND RESOURCE USES

This section discusses the current and reasonably anticipated future land uses at the Skeet Range (IR Site 29). The site and resource uses help determine realistic exposure scenarios.

Access to the site from onshore is currently restricted along IR Site 1. The entire perimeter of the property is fenced and closed to public use. All of the historical structures related to the shooting ranges have been removed from the property. The sandy beach located on the western boundary of IR Site 1 facing the Skeet Range (IR Site 29) contains riprap and remnants of a former concrete ramp. Access to the site by vessel is limited as there is no usable boat ramp or mooring available.

The proposed future land uses of the onshore property adjacent to the Skeet Range (IR Site 29) will involve no infrastructure development (e.g. pier construction) that could result in excavation or dredging of the sediments. Proposed future land uses of the onshore areas adjacent to the site will consist of recreation and open space including a Bay Trail, shoreline park, and Point Alameda Regional Park (ARRA, 1996). The Bay Trail is the main feature planned to run the length of Oakland Alameda Estuary to allow full public access to the shoreline, whereas the tip of Alameda Point will be preserved as a regional park for fishing and other recreational uses. South of the point, the open areas will be used for recreational sports including potential construction of soccer and baseball fields and a golf course. The offshore area of the site will remain open-water with no further development in the future.

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7.0 SUMMARY OF SITE RISKS

Risk assessments provide evaluations of the potential threats to human health and/or the environment in the absence of any remedial action. They form the basis for determining whether remedial actions are necessary and the justification for performing remedial actions (US EPA, 1988). Ecological and human health risk assessments were conducted for the Skeet Range (IR Site 29) as part of the RI (Battelle et al., 2004). A summary of these assessments is provided below.

7.1 Ecological Risk Assessment

The ecological risk assessment was conducted following U.S. EPA (1992, 1997) and Navy (CNO, 1999) guidelines. Lead shot and PAHs were identified as preliminary COPCs and, based on the CSM developed for the site (Figure 6), birds were identified as the primary receptors of concern.

Although earlier data demonstrated that the lead from the lead shot was not dissolving into the surrounding sediment, diving ducks were identified as potential receptors of concern because they may be exposed by ingesting lead shot in the sediment during typical foraging activities. Diving ducks generally dive into the water and forage for organisms living in the top 5 cm of sediment and may inadvertently or intentionally select lead shot as grit (i.e., shellhash) from sediment for grinding down shellfish in their gizzard resulting in potential toxicity (Sanderson and Bellrose, 1986; Scheuhammer and Norris, 1995; Pain, 1996).

As part of the screening-level risk assessment, a site-specific probability model was developed to determine the likelihood that diving ducks may ingest lead shot while foraging for grit in sufficient quantity to cause harm. The model took into account the probability of ingesting a lead shot in a single probe, the number of dives per day a bird makes to get grit, how often the bird forages at the site relative to the time it spends at other locations, and the number of shot needed to be consumed before adverse effects would occur.

To determine the number of shot required to impair the health of waterfowl such as the diving ducks, a literature review was conducted to estimate a No Observable Adverse Effects Level (NOAEL). NOAELs refer to the maximum concentration of a particular contaminant that will not cause adverse effects in exposed species; in other words, concentrations below the NOAEL are assumed to be 'safe' while concentrations above may be associated with health effects.

Using the field collected lead shot data, the NOAEL, and conservative exposure factors including the assumption that diving ducks spend 100% of their time in one location, the model suggested that there was elevated risk to diving ducks at approximately half of the locations. Because of the conservatism inherent in this model, a Baseline Ecological Risk Assessment (BERA) was conducted to better characterize the natural variability in model exposure parameters. The BERA relied on distributions to describe each parameter rather than a single value.

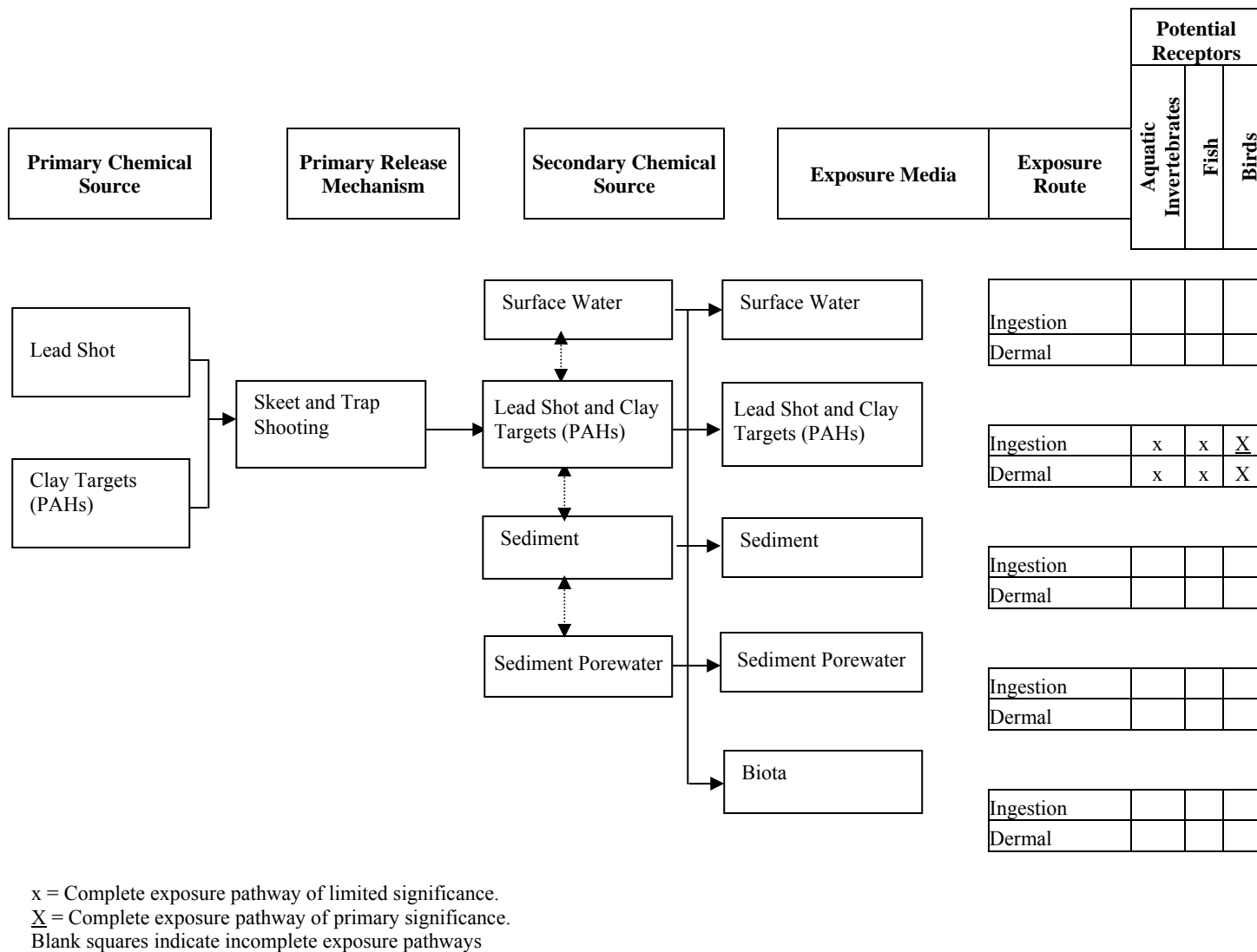


Figure 6. Ecological Site Conceptual Exposure Model

The BERA showed that approximately 96% of the time less than 1 in 1,000 birds foraging at the site would potentially be at risk, indicating that there is a very limited chance for birds at Alameda Point to be exposed to lead shot at harmful levels. Exposure of diving ducks to lead shot may even be more limited given the thick mats of *Ampelisca* (worm) tubes found on the surface of all samples collected from the 2001 investigations.

In summary, the ecological risk assessment determined that there are no significant risks in the sediments offshore of the former Skeet Range that would impact the ecological community based on current or reasonably anticipated future land use.

7.2 Evaluation of Potential Human Health Risks

To evaluate the potential risks to human health, a CSM was developed to identify the potential exposure pathways through which likely human receptors might come in contact with impacted sediment at the site. Under both current and future site conditions, the likely human receptors at the site would be on-site workers (current), recreational users (future) and off-site outdoor maintenance workers (future). However, the primary site-related contaminants (lead shot and PAHs from the clay targets) are located approximately 80 ft offshore, in water depths of 5 ft or greater. As a result, direct human exposures (such as dermal contact or ingestion of sediment) are very limited under current or future conditions and no complete direct exposure pathways were identified in the CSM.

It is also possible for humans to be exposed through indirect exposure pathways, such as by eating fish that have been exposed to site-related contaminants. However, neither lead nor PAHs are known to be retained in the edible tissues of exposed fish. As a result, the CSM also did not identify any complete indirect exposure pathways for humans.

To ensure that potential risks to human receptors were not underestimated, a preliminary screening evaluation was conducted at the western and southern boundary of Alameda Point. This screening considered exposures through direct contact with sediment (via wading) as well as consumption of shellfish (mussels or clams) and included data collected from the shoreline of Alameda Point in the vicinity of the Skeet Range (IR Site 29). The results indicated that the potential risks based on exposures to the site-related contaminants were similar to those associated with background locations in San Francisco Bay. Further evaluation of the onshore area and the nearshore sediments will be conducted as part of the investigation for IR Site 1 and for Western Bayside (Battelle 2005; Battelle et al., 2005).

Based on this evaluation, it was concluded that there are no current or future human health risks associated with the sediments offshore of the former Skeet Range based on current or reasonably anticipated future land uses.

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8.0 DESCRIPTION OF NO ACTION ALTERNATIVE

The Skeet Range (IR Site 29) site was determined to require no further action for sediments that might have been affected by site-specific uses. This determination was based on the results of previous investigations, lab analyses, interpretation of data, review of current and potential future uses at the site and a thorough ecological and human health risk assessment. Results showed the site does not pose unacceptable risk to human health or the environment. Accordingly, no remedial action is appropriate for the site.

The DON's determination that no remedial action is necessary reflects the conclusion that there are no threats to human health or the environment. Under the no action alternative, monitoring, periodic reviews, deed restrictions (including deed notification) and CERCLA 5-year reviews are not required. The U.S. EPA, DTSC, and RWQCB agree with this determination. This no further action ROD constitutes site closeout in the Defense Environmental Restoration Program.

Section 121(d) of CERCLA states that remedial actions at CERCLA sites must, upon completion, meet any federal (or state, if more stringent) environmental standards, requirements, criteria, or limitations that are determined to be applicable or relevant and appropriate requirements (ARARs). ARARs do not apply unless remedial action is being taken at a site; therefore, they do not apply to the no further action remedy for IR Site 29 addressed in this ROD.

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9.0 DOCUMENTATION OF SIGNIFICANT CHANGES

The Proposed Plan for IR Site 29 was released for public comment on February 15, 2005. The Proposed Plan identified no further action as the appropriate response for the site. The DON has reviewed all written and verbal comments submitted during the public comment period and determined that no significant changes to the selected remedy of no further action were necessary or appropriate.

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10.0 RESPONSIVENESS SUMMARY

The Proposed Plan for IR Site 29 was released for public comment on February 15, 2005. The comment period extended from February 15 to March 18, 2005. A public meeting was held on March 7, 2005. All comment letters received on the Proposed Plan as well as a transcript of the March 7 public meeting are presented in Attachment C. A summary of the comments received and the DON responses are provided in Table 1.

Table 1. Summary of Comments Received and Responses

Comment No.	Comment	Response
Comments from the Alameda Reuse and Redevelopment Authority (dated March 17, 2005)		
1	<p>Land use plans for Alameda Point include a future, public beach in the vicinity of the Skeet Range. Remediation of this area must be sufficiently thorough to allow unrestricted recreational land use, without unacceptable human health risks. The <i>Proposed Plan</i> does not acknowledge this remedial goal.</p> <p>Please state clearly that both the beach area and the submerged lands shoreward of the footprint addressed by this Proposed Plan will be included in the remedial decisionmaking for IR Site 1.</p> <p>The <i>Proposed Plan</i> states “lead shot as well as clay target fragments...reside in the offshore sediment adjacent to the Skeet Range, concentrated in an offshore area approximately 1,300 feet by 800 feet in average water depths ranging from 5 to 12 feet mean [lower] low water. The adjacent shoreline beach areas will be investigated as part of IR Site 1”. (page 2) Further, “the primary site-related contaminants (lead shot and PAHs from clay targets) are located approximately 80 feet offshore, in water depths averaging 5 ft or greater.” (page 5). The <i>Proposed Plan</i> does not clearly state that the scope of remedial decisionmaking for IR Site 1 includes not only the “shoreline beach areas” but also the submerged area within 80 feet of the shoreline. If contaminated sediments are present in relatively-shallow near-shore areas, unacceptable human health risks may occur from residential use.</p>	<p>Previous investigations (TtEMI, 2000) evaluated the presence of Skeet Range related contaminants in sediments from the nearshore area. As described in Section 1.1.3.1 of the Skeet Range Remedial Investigation Report, transects every 45 ft extending 1,000 ft offshore covering an angle of 90 degrees outward from each of the two shooting ranges were evaluated for lead shot, metals, PAHs, and semi-volatile compounds. Additional samples were also analyzed for total petroleum hydrocarbons, pesticides, and PCBs. Based on this information, there is no evidence to suggest that adjacent onshore areas or submerged areas within 80 feet of the shoreline were significantly impacted by historical activities at the Skeet Range. Therefore, the detailed risk evaluations for IR Site 29 focused on the offshore areas with the highest concentration of site-related COPC. In addition to the historical evaluations (TtEMI, 2000), the nearshore areas will be further investigated as described below.</p> <p>In March 2005, 12 soil borings were collected along a roughly north-south oriented transect near the western shoreline of the IR Site 1 Beach Area (see <i>Expedited Field Sampling Work Plan at IR Sites 1 and 15, Alameda Point</i>, March 11, 2005). Borings were completed to 10 ft bgs, or until groundwater was encountered. As part of that sampling event, 12 sediment cores were also collected immediately offshore of the Beach Area and directly perpendicular to the locations of the onshore soil boring, to a depth of 4 ft below the sediment surface.</p> <p>As part of the Offshore Sediment Core Study currently planned for June 2005, three four-ft sediment cores will be collected parallel to the shoreline as close to shore as safely possible at high tide to address concerns about the submerged area within 80 ft of the shoreline. These data will be presented in a revised Data Summary Memorandum for Western Bayside/Breakwater Beach, currently scheduled to be completed in the fall of 2005.</p>

Table 1. Summary of Comments Received and Responses (continued)

Comment No.	Comment	Response
Comments from Mr. George B. Humphreys (dated March 20, 2005)		
1	What has been the total dollar expenditure made by the Navy to date in investigations, sampling, and conducting probabilistic risk assessments at the Skeet Range IR Site 29? From the information presented by Mr. Michael Pound at the RAB Meeting on March 5, 2003, it appears that the area of the Skeet Range containing lead shot densities in the range of 11 to 50 shots per liter of sediment is approximately 300 ft by 600 ft. The estimated sedimentation rate at the site is 1 cm per year. In 30 years, the deposition of sediment would be approximately 1 ft (30 cm \approx 1ft). Thus most of the lead shot should be located in the top foot of sediment. This represents about 6,000 cu yds of sediment. What would be the cost of scooping up and disposing of 6,000 cu yds of contaminated sediment? I suspect that it might be less than what the Navy has already spent trying to demonstrate that no action is necessary.	The data collected and analyses performed for IR Site 29 were necessary to adequately delineate and describe the conditions at the site and were done in the most cost effective manner possible. The primary objectives of the Remedial Investigation (RI) were to characterize the nature and extent of contamination at the site and to delineate those areas potentially posing unacceptable risk to humans and the environment. The investigations at IR Site 29 focused on evaluating the potential risks to human and ecological receptors according to the CERCLA process. Remedial Action Objectives (RAO) and Remedial Alternatives, inclusive of costs, are developed in the Feasibility Study (FS) step of the CERCLA process. Because the no further action determination was made in the Remedial Investigation (RI) step of the CERCLA process, an FS was not completed. Therefore, costs of remediation are unknown. In support of the environmental program for the Skeet Range, the Navy has expended approximately \$500,000.
2	In performing the environmental risk assessment, the Navy evaluated the effect on two types of diving birds (scaups and surf scoters). The technical complexity of the binomial probabilistic risk assessment employed is indeed mind boggling. The credibility of the results is fraught with uncertainty because of the large number of assumptions which are used as inputs. One factor used is the 'Site Utilization Factor' (SUF) or the fraction of the time the birds would be feeding at the former skeet range. From Mr. Pound's presentation, an SUF of 0.1 apparently was used. If it is acceptable to leave this material in place, there could be any number of other former skeet ranges around the bay and the affected birds could be ingesting shot at each of those locations when they aren't foraging at Alameda. An example would be the Chevron-Texaco gun club near Pt. Molate in Richmond. Therefore the conclusion that "96% of the time, less than 1 in 1,000 birds" would be at risk may underestimate the cumulative impact of allowing these types of untreated sediments to remain in place.	As discussed on p. 106 of the Skeet Range Remedial Investigation report (Battelle et al., 2004), the possibility that lead shot exposure could occur off site was considered as part of the evaluation. However, with the exception of the skeet range at Clipper Cove off of Treasure Island, there were no other subtidal skeet ranges identified within the foraging ranges of the scarp and surf scoter. The lead shot at Clipper Cove is buried under clean sediment and unavailable to foraging ducks, therefore, the exposure from that site is minimal. Thus, the assumption that exposure to lead shot for diving ducks is limited to the Alameda Point Skeet Range is reasonable.

Table 1. Summary of Comments Received and Responses (continued)

Comment No.	Comment	Response
Comments from Mr. George B. Humphreys (dated March 20, 2005) (continued)		
3	One bottom feeding fish present in the waters offshore at Alameda is the sturgeon. These fish are very long-lived. Have you evaluated how much lead might be ingested by sturgeon over a 50-60 year period and what the human health risk would be of humans eating such fish or their roe.	As described on p.8 of the Draft Final Skeet Range Remedial Investigation Report, the data indicate that lead is not dissolving from the lead shot in quantities that would be considered to be biologically of concern based on AWQC and is not present at concentrations that could cause adverse ecological effects. Based on this information, it is unlikely that fish from the site are exposed to elevated levels of lead from the presence of lead shot. In addition, lead does not accumulate in edible tissues of fish, rather it preferentially partitions into bones, therefore, risks to humans consuming fish from the site would be very low.
Comments from Mr. Patrick Lynch Recorded at the Proposed Plan Public Meeting (dated March 7, 2005)		
1	...It really raises an environmental justice concern to me when we see resources being spent on this offshore area again without addressing contamination that exists on the fence line and potentially off site....You know, I don't see the point in spending limited cleanup dollars performing this kind of research at this facility when there is no meaningful cleanup occurring.	See the response to Comment #1 from Mr. George B. Humphreys and Comment #1 from the ARRA. The investigations conducted at IR Site 29 have been performed in accordance with the CERCLA process for the purpose of identifying sediments potentially requiring remediation. Based on these evaluations, there are no site-related contaminants that pose an unacceptable risk to human health or the environment, therefore, no remediation is necessary.
2	And you know, I'm also concerned that this is a proposal to leave this contamination at the site of a proposed public beach. We'll spend between 150 million and 500 million dollars, largely to prevent contamination on this base from making its way into the bay.	Based on the results of the ecological and human health risk assessments, there is no contamination at the site that poses an adverse health affect to either humans or the environment. To confirm that exposures at the proposed beach are minimal, additional sampling will be conducted (see response to Comment #1 from ARRA).

Table 1. Summary of Comments Received and Responses (continued)

Comment No.	Comment	Response
Comments from Mr. Patrick Lynch Recorded at the Proposed Plan Public Meeting (dated March 7, 2005) (continued)		
3	<p>... We have clearly-defined contamination in the bay, and we're not willing to remove it. Maybe it's too expensive. But we don't know that, because we're not willing to do a Feasibility Study and produce a cost estimate of what it would cost to do that remediation.</p> <p>And it might be that this contamination will pose a risk in the future, but because we're not going to do a Record of Decision where we recognize we're leaving toxic material in the bay, there's not going to be a five-year follow-up.</p> <p>And so, you know, I really think that we need to do the complete step. We need to do the Feasibility Study, demonstrate that this is cost prohibitive. And I think we need to reach a Record of Decision where there will be some review of the decision.</p>	As stated in the Proposed Plan, the Navy's recommendation of no further action for IR Site 29 was based on the evidence from previous investigations that current and anticipated future conditions at the site do not present an unacceptable risk to humans or the environment and that no remediation is required. Following a thorough review of this information, the Alameda Point Base Realignment and Closure (BRAC) cleanup team (BCT) concurs with the Navy's proposed determination. Per the CERCLA process, a Feasibility Study (FS) is not warranted because no remedial action is proposed. The Record of Decision will memorialize the BCT's decision following Navy and agency review and concurrence.
Comments from Mr. Peter Russell Recorded at the Proposed Plan Public Meeting (dated March 7, 2005) (continued)		
1	<p>The gist is a single comment; that is, that the shoreline is slated to be a public beach and we want to make sure there are no gaps in the evaluation so that recreational use would be compromised.</p> <p>There are two brief passages out of the Proposal Plan that I would like to read that leave me with a little bit of wonder about whether that is going to be fully addressed by either IR Site 29 or IR Site 1. The first is on Page 2 – and I will quote it – in the righthand side column. “As a result, lead shot, as well as clay target fragments, reside in the offshore sediment adjacent to the Skeet Range concentrated in an offshore area approximately by 1300 by 800 feet in average water depths ranging from 5 to 12 feet mean low low water.” It should be “lower low water,” but that's not...”The adjacent shoreline beach areas will be investigated as part of IR Site 1”.</p> <p>Then on page 5 in the lefthand column, there's a sentence, “However the primary site-related contaminants (lead shot and PAHs from the clay targets) are located approximately 80 feet offshore in water depths ranging – averaging 5 feet or greater.</p> <p>So I think the possible gap is not the beach itself, which I think, quite clearly, will be picked up by IR 1, but the water that is 5 feet deep and shallower that runs from the beach itself out the 80 feet offshore where the IR 29 proper begins. I think that needs to be looked at to verify that there are no unacceptable health hazards – human health hazards – for recreational land use.</p>	See the response to Comment #1 from the ARRA.

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11.0 REFERENCES

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Attachment A

Site Specific Administrative Record Index

ALAMEDA POINT NAS

DRAFT ADMINISTRATIVE RECORD FILE INDEX - UPDATE (SORTED BY RECORD DATE/RECORD NUMBER)

SITE 29 - SKEET RANGE

UIC No. / Rec. No.							Location
Doc. Control No.	Prc. Date	Author Affil.					FRC Access. No.
Record Type	Record Date	Author					FRC/SWDIV Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.					FRC Warehouse Loc.
Approx. # Pages	EPA Cat. #	Recipient	Subject/Comments	Classification	Keywords	Sites	CD No.
N00236 / 000205 G477703 & SWDIV SER 06CA.MB/0707 PLAN GS-10F-0275K 00240	07-12-2001 07-10-2001 NONE	BATTELLE NAVFAC - SOUTHWEST DIVISION	DRAFT SKEET RANGE EVALUATION WORK PLAN - INCLUDES SWDIV TRANSMITTAL LETTER BY M. MCCLELLAND [A PORTION OF THE MAILING LIST IS CONFIDENTIAL]	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	DQO TPH WORK PLAN	029	FRC - LAGUNA NIGEL 181-03-0179 10 OF 46 MF104521
N00236 / 002082 NONE CORRESP NONE 00001	08-19-2005 08-15-2001 NONE	U.S. EPA - SAN FRANCISCO A. COOK NAVFAC - SOUTHWEST DIVISION M. MCCLELLAND	REVIEW AND NO ADDITIONAL COMMENTS ON THE SKEET RANGE EVALUATION WORK PLAN (WP)	ADMIN RECORD	COMMENTS WP	029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002083 NONE CORRESP NONE 00004	08-19-2005 08-15-2001 NONE	CRWQCB - OAKLAND B. JOB NAVFAC - SOUTHWEST DIVISION M. MCCLELLAND	COMMENTS ON THE DRAFT SKEET RANGE EVALUATION WORK PLAN (WP){PORTION OF MAILING LIST IS CONFIDENTIAL}	ADMIN RECORD CONFIDENTIAL	COMMENTS WP	029	SOUTHWEST DIVISION - BLDG. 1

UIC No. / Rec. No.							Location
Doc. Control No.	Prc. Date	Author Affil.					FRC Access. No.
Record Type	Record Date	Author					FRC/SWDIV Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.					FRC Warehouse Loc.
Approx. # Pages	EPA Cat. #	Recipient	Subject/Comments	Classification	Keywords	Sites	CD No.
N00236 / 002084 NONE CORRESP NONE 00005	08-19-2005 08-16-2001 NONE	DFG - SACRAMENTO C. HUANG NAVFAC - SOUTHWEST DIVISION M. MCCLELLAND	COMMENTS ON THE DRAFT SKEET RANGE EVALUATION WORK PLAN (WP)	ADMIN RECORD	COMMENTS WP	029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002085 NONE CORRESP NONE 00002	08-19-2005 08-17-2001 NONE	FISH & WILDLIFE - SACRAMENTO J. HAAS NAVFAC - SOUTHWEST DIVISION M. MCLELLAND	COMMENTS ON THE DRAFT SKEET RANGE EVALUATION WORK PLAN (WP)	ADMIN RECORD	COMMENTS WP	029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002086 NONE CORRESP NONE 00004	08-19-2005 09-06-2001 NONE	DTSC - BERKELEY D. MURPHY NAVFAC - SOUTHWEST DIVISION M. MCLELLAND	COMMENTS ON THE FORMER SKEET RANGE DRAFT SAMPLING PLAN FOR ECOLOGICAL RISK ASSESSMENT (ERA)	ADMIN RECORD	COMMENTS ERA	029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 000278 G477703 PLAN GS-10F-0275K 00050	11-02-2001 10-19-2001 NONE	BATTELLE NAVFAC - SOUTHWEST DIVISION	DRAFT SKEET RANGE EVALUATION SITE SPECIFIC HEALTH AND SAFETY PLAN	ADMIN RECORD INFO REPOSITORY	BTEX FSP PAH PCB RI SHSP TPH	029	FRC - LAGUNA NIGEL 181-03-0179 13 OF 46 MF104521

UIC No. / Rec. No.							Location
Doc. Control No.	Prc. Date	Author Affil.					FRC Access. No.
Record Type	Record Date	Author					FRC/SWDIV Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.					FRC Warehouse Loc.
Approx. # Pages	EPA Cat. #	Recipient	Subject/Comments	Classification	Keywords	Sites	CD No.
N00236 / 000268 G477703 & SWDIV SER 06CM.MB/1075 & 1167 PLAN GS-10F-0275K 00100	11-02-2001 11-01-2001 NONE	BATTELLE NAVFAC - SOUTHWEST DIVISION	FINAL SKEET RANGE EVALUATION WORK PLAN INCLUDES SWDIV TRANSMITTAL LETTER BY M. BLOOM. ***COMMENTS: THE "DRAFT FINAL" DATED 10/16/01, BECAME "FINAL" ON 11/01/01 - NEW COVER PAGE HAS BEEN INSERTED INTO THE DOCUMENT TO REFLECT THE CHANGE***	ADMIN RECORD INFO REPOSITORY	BCT FSP OU PAH PCB RI TPH-DRO	029	FRC - LAGUNA NIGEL 181-03-0179 13 OF 46 MF104521
N00236 / 000280 PROJECT NO. G477703 PLAN N47408-95-D-0730 00225	11-30-2001 11-27-2001 NONE	BATTELLE H. KITCHEN NAVFAC - SOUTHWEST DIVISION	SKEET RANGE EVALUATION - SITE- SPECIFIC HEALTH AND SAFETY PLAN	ADMIN RECORD INFO REPOSITORY	BTEX COPEC DATA H&SP ORDNANCE PAH PCB SEDIMENTS SSHP TPH UXO	029	FRC - LAGUNA NIGEL 181-03-0179 13 OF 46 MF104521
N00236 / 002087 NONE CORRESP NONE 00008	08-19-2005 07-02-2002 NONE	ENTRIX J. HOLDER NAVFAC - SOUTHWEST DIVISION M. BLOOM	MEMORANDUM - SENSITIVITY ANALYSIS ON EXPOSURE PARAMETERS FOR THE SKEET RANGE BINOMIAL PROBABILITY MODEL AND EXPLORATION OF THE IMPACT OF CORRECTED VS. UNCORRECTED AMPHIPOD DATA ON THE WEIGHT OF EVIDENCE (WOE) APPROACH	ADMIN RECORD	COMMENTS WOE	029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 000270 PROJ. NO. G477703 RPT GS-10F-0275K 00120	02-06-2003 01-28-2003 NONE	VARIOUS AGENCIES NAVFAC - SOUTHWEST DIVISION	DRAFT REMEDIAL INVESTIGATION REPORT FOR SKEET RANGE - INCLUDES ELECTRONIC APPENDICES	ADMIN RECORD INFO REPOSITORY	HPAH LPAH PAH PCB TOC TPH TPH-DRO	029 OU 4	FRC - LAGUNA NIGEL 181-03-0188 1 OF 17 RF5258

UIC No. / Rec. No.							Location
Doc. Control No.	Prc. Date	Author Affil.					FRC Access. No.
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Approx. # Pages	EPA Cat. #	Recipient	Subject/Comments	Classification	Keywords	Sites	CD No.
N00236 / 002088 NONE CORRESP NONE 00008	08-19-2005 04-11-2003 NONE	DTSC - BERKELEY M. LIAO NAVFAC - SOUTHWEST DIVISION A. DICK	REVIEW AND COMMENTS ON THE DRAFT REMEDIAL INVESTIGATION REPORT (RI) FOR THE SKEET RANGE	ADMIN RECORD	COMMENTS OU RI	029 OU 4B	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002089 NONE CORRESP NONE 00004	08-19-2005 05-02-2003 NONE	FISH & WILDLIFE - SACRAMENTO D. HARLOW NAVFAC - SOUTHWEST DIVISION A. DICK	REVIEW AND COMMENTS ON THE DRAFT REMEDIAL INVESTIGATION (RI) FOR THE SKEET RANGE	ADMIN RECORD	COMMENTS RI	029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002107 NONE COMMENTS NONE 00015	08-30-2005 05-13-2003 NONE	EPA M. RIPPERDA NAVFAC - SOUTHWEST DIVISION M. MCCLELLAND	E-MAIL PROVIDING EPA'S COMMENTS ON DRAFT SKEET RANGE REMEDIAL INVESTIGATION REPORT	ADMIN RECORD INFO REPOSITORY	COMMENTS RI	029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002106 SWDIVSER 06CA.AD/1389 RESPONSE NONE 00025	08-30-2005 10-14-2003 NONE	NAVFAC - SOUTHWEST DIVISION M. MCCLELLAND VARIOUS AGENCIES	RESPONSE TO 14 MAY 2003 COMMENTS ON DRAFT SKEET RANGE REMEDIAL INVESTIGATION REPORT [PORTION OF MAILING LIST IS CONFIDENTIAL]	ADMIN RECORD INFO REPOSITORY	RESPONSE RI	029	SOUTHWEST DIVISION - BLDG. 1

UIC No. / Rec. No.							Location
Doc. Control No.	Prc. Date	Author Affil.					FRC Access. No.
Record Type	Record Date	Author					FRC/SWDIV Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.					FRC Warehouse Loc.
Approx. # Pages	EPA Cat. #	Recipient	Subject/Comments	Classification	Keywords	Sites	CD No.
N00236 / 002090 SWDIV SER 06CA.AD/1389 CORRESP NONE 00051	08-19-2005 10-15-2003 NONE	NAVFAC - SOUTHWEST DIVISION M. MCCLELLAND U.S. EPA - SAN FRANCISCO M. RIPPERDA	RESPONSES TO REGULATORY AGENCY COMMENTS ON THE DRAFT REMEDIAL INVESTIGATION (RI) REPORT FOR THE SKEET RANGE {PORTION OF MAILING LIST IS CONFIDENTIAL}	ADMIN RECORD CONFIDENTIAL	COMMENTS RI	029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 001754 G477703 & SWDIV SER 06CA.GL/1546 CORRESP GS-10F-0275K 00022	01-14-2004 12-04-2003 NONE	NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA U.S. EPA - SAN FRANCISCO A. COOK	ADDITIONAL RESPONSES TO COMMENTS ON THE DRAFT REMEDIAL INVESTIGATION (RI) REPORTS FOR THE SEAPLANE LAGOON AND THE SKEET RANGE{PORTION OF MAILING LIST IS CONFIDENTIAL}	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	COMMENTS RI	029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 001768 SWDIV SER 06CA.DN/0125 CORRESP NONE 00012	03-01-2004 12-10-2003 NONE	NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA U.S. EPA - SAN FRANCISCO A. COOK	10 DECEMBER 2003 MEETING MINUTES TO DISCUSS THE NAVY'S RESPONSE TO AGENCY COMMENTS (RTC) ON THE DRAFT SKEET RANGE REMEDIAL INVESTIGATION	ADMIN RECORD INFO REPOSITORY	COMMENTS MTG MINS RI	001 017 029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002100 NONE RESPONSE NONE 00003	08-23-2005 12-18-2003 NONE	DTSC - BERKELEY M. LIAO NAVFAC - SOUTHWEST DIVISION D. NEWTON	COMMENTS ON RESPONSE TO COMMENTS ON DRAFT REMEDIAL INVESTIGATION (RI) REPORT FOR SKEET RANGE AND OPERABLE UNIT	ADMIN RECORD INFO REPOSITORY	COMMENTS OU RESPONSE RI	029 OU 4B	SOUTHWEST DIVISION - BLDG. 1

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Doc. Control No.	Prc. Date	Author Affil.					FRC Access. No.
Record Type	Record Date	Author					FRC/SWDIV Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.					FRC Warehouse Loc.
Approx. # Pages	EPA Cat. #	Recipient	Subject/Comments	Classification	Keywords	Sites	CD No.
N00236 / 001859 NONE LTR NONE 00004	08-16-2004 06-11-2004 NONE	NAVFAC - SOUTHWEST DIVISION T. MACCHARELLA U.S. EPA - SAN FRANCISCO A. COOK	CHANGES MADE TO THE DRAFT FINAL REMEDIAL INVESTIGATION REPORT FOR SKEET RANGE [PORTION OF MAILING LIST IS CONFIDENTIAL]. ***COMMENTS: (W/O ENCLOSURE, DOCUMENT NOT RECEIVED IN AR)***	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	REPORT	029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002099 NONE LTR NONE 00001	08-22-2005 06-29-2004 NONE	U.S. FISH AND WILDLIFE SERVICE B. STANTON NAVFAC - SOUTHWEST DIVISION V. LAU	E-MAIL PROVIDING THE U.S. FISH AND WILDLIFE SERVICE CONCURRENCE WITH NO FURTHER ACTION (NFA) ON DRAFT FINAL REMEDIAL INVESTIGATION (RI) REPORTS FOR SEAPLANE LAGOON AND SKEET RANGE	ADMIN RECORD INFO REPOSITORY	NFA RI	017 029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 001903 SWDIV SER 06CA.DN\0716 & 06CA.DN\0610 RPT NONE 00100	12-06-2004 07-01-2004 NONE	BATTELLE NAVFAC - SOUTHWEST DIVISION	FINAL REMEDIAL INVESTIGATION REPORT FOR THE SKEET RANGE {PORTION OF MAILING LIST IS CONFIDENTIAL, CD COPY ENCLOSED}. ***COMMENTS: DON IS ISSUING THE REPORT AS A FINAL. REPLACEMENT PAGES ISSUED FOR FINAL REMEDIAL INVESTIGATION REPORT DATED FOR 13 JULY 2004. REPLACED PAGES: REPORT COVER PAGE, TOC PAGE IX, X, XI, XII, PAGES 109 THROUGH 114.***	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	PCB TOC TPH VOC	029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 001862 NONE LTR NONE 00004	08-16-2004 07-13-2004 NONE	NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA U.S. EPA - SAN FRANCISCO A. COOK	REPLACEMENT PAGES FOR FINAL REMEDIAL INVESTIGATION (RI) REPORT FOR SKEET RANGE [PORTION OF MAILING LIST IS CONFIDENTIAL]. ***COMMENTS: (W/O ENCLOSURE, REPLACEMENT PAGES NOT RECEIVED IN AR)***	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY		029	SOUTHWEST DIVISION - BLDG. 1

UIC No. / Rec. No.							Location
Doc. Control No.	Prc. Date	Author Affil.					FRC Access. No.
Record Type	Record Date	Author					FRC/SWDIV Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.					FRC Warehouse Loc.
Approx. # Pages	EPA Cat. #	Recipient	Subject/Comments	Classification	Keywords	Sites	CD No.
N00236 / 001889 SER BPMOW.DN\0044 RPT NONE 00009	10-27-2004 10-25-2004 NONE	BRAC - SAN DIEGO R. PLASEIED USEPA - SAN FRANCISCO A. COOK	DRAFT PROPOSED PLAN FOR FORMER SKEET RANGE	ADMIN RECORD INFO REPOSITORY	IRP PAH	029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002091 NONE COMMENTS NONE 00002	08-22-2005 12-18-2004 NONE	EPA - SAN FRANCISCO M. RIPEPERDA NAVFAC - SOUTHWEST DIVISION D. NEWTON	COMMENTS ON THE DRAFT PROPOSED PLAN FOR THE SKEET RANGE AND CONCURRENCE FOR NO FURTHER ACTION (NFA) AT THIS SITE	ADMIN RECORD INFO REPOSITORY	COMMENTS NFA	029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002097 NONE RPT NONE 00006	08-22-2005 02-01-2005 NONE	NAVFAC - SOUTHWEST DIVISION NAS - ALAMEDA POINT	PROPOSED PLAN FOR FORMER SKEET RANGE	ADMIN RECORD INFO REPOSITORY	ARRA IR	029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002093 NONE COMMENTS NONE 00004	08-22-2005 02-09-2005 NONE	DTSC - BERKELEY M. LIAO NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	COMMENTS ON PROPOSED PLAN FOR FORMER SKEET RANGE	ADMIN RECORD INFO REPOSITORY	COMMENTS	029	SOUTHWEST DIVISION - BLDG. 1

UIC No. / Rec. No.							Location
Doc. Control No.	Prc. Date	Author Affil.					FRC Access. No.
Record Type	Record Date	Author					FRC/SWDIV Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.					FRC Warehouse Loc.
Approx. # Pages	EPA Cat. #	Recipient	Subject/Comments	Classification	Keywords	Sites	CD No.
N00236 / 002094 NONE PUB NOTICE NONE 00001	08-22-2005 02-11-2005 NONE	ALAMEDA JOURNAL GENERAL PUBLIC	PUBLIC NOTICE: PUBLIC MEETING AND COMMENT PERIOD FROM 15 FEBRUARY TO 18 MARCH 2005 ON PROPOSED PLAN FOR FORMER SKEET RANGE (DOCUMENT ORIGINATED FROM NAVFAC - SOUTHWEST DIVISION)	ADMIN RECORD INFO REPOSITORY	COMMENTS PUBNOT	029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002095 NONE PUB NOTICE NONE 00001	08-22-2005 02-11-2005 NONE	THE OAKLAND TRIBUNE GENERAL PUBLIC	PUBLIC NOTICE: PUBLIC MEETING AND COMMENT PERIOD FROM 15 FEBRUARY TO 18 MARCH 2005 ON PROPOSED PLAN FOR FORMER SKEET RANGE (DOCUMENT ORIGINATED FROM NAVFAC - SOUTHWEST DIVISION)	ADMIN RECORD INFO REPOSITORY	PUBNOT	029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002096 NONE COMMENTS NONE 00003	08-22-2005 03-20-2005 NONE	RAB MEMBER G. HUMPHREYS NAVFAC - SOUTHWEST DIVISION	COMMENTS ON PROPOSED PLAN FOR FORMER SKEET RANGE (INCLUDES PUBLIC COMMENT FORM)	ADMIN RECORD INFO REPOSITORY	COMMENTS	029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002092 NONE LTR NONE 00002	08-22-2005 03-23-2005 NONE	CRWQCB - SAN FRANCISCO J. HUANG NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	CONCURRENCE WITH NO FURTHER ACTION (NFA) ON PROPOSED PLAN FOR FORMER SKEET RANGE {PORTION OF MAILING LIST IS CONFIDENTIAL}	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	NFA	029	SOUTHWEST DIVISION - BLDG. 1

UIC No. / Rec. No.							Location
Doc. Control No.	Prc. Date	Author Affil.					FRC Access. No.
Record Type	Record Date	Author					FRC/SWDIV Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.					FRC Warehouse Loc.
Approx. # Pages	EPA Cat. #	Recipient	Subject/Comments	Classification	Keywords	Sites	CD No.
N00236 / 002115 SWDIV SER BPMOW.DN\0615 LTR NONE 00002	09-12-2005 04-12-2005 NONE	NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA EPA - SAN FRANCISCO A. COOK	SHCEDULE EXTENTION REQUEST FOR SKEET RANGE DRAFT RECORD OF DECISION (ROD)	ADMIN RECORD INFO REPOSITORY	ROD	029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002014 PROJ NO. G486085 & SWDIV SER BPMOW.DN\0619 RPT N47408-01-D-8207 00075	04-19-2005 04-18-2005 NONE	BATTELLE NAVFAC - SOUTHWEST DIVISION	DRAFT RECORD OF DECISION (ROD) FOR THE SKEET RANGE	ADMIN RECORD INFO REPOSITORY	PAH ROD TPH	029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002102 NONE CORRESP NONE 00001	08-23-2005 06-13-2005 NONE	U.S. EPA - SAN FRANCISCO M. RIPPERDA NAVFAC - SOUTHWEST DIVISION D. NEWTON	COMMENTS ON DRAFT RECORD OF DECISION (ROD) FOR THE SKEET RANGE	ADMIN RECORD INFO REPOSITORY	COMMENTS ROD	029	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002101 NONE COMMENTS NONE 00001	08-23-2005 06-16-2005 NONE	CRWQCB - SAN FRANCISCO J. HUANG NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	CONCURRENCE WITH NO FURTHER ACTION (NFA) ON THE DRAFT RECORD OF DECISION (ROD) FOR SKEET RANGE	ADMIN RECORD INFO REPOSITORY	IR NFA ROD	029	SOUTHWEST DIVISION - BLDG. 1

UIC No. / Rec. No.								Location
Doc. Control No.	Prc. Date	Author Affil.					FRC Access. No.	
Record Type	Record Date	Author					FRC/SWDIV Box No.	
Contr./Guid. No.	CTO No.	Recipient Affil.					FRC Warehouse Loc.	
Approx. # Pages	EPA Cat. #	Recipient	Subject/Comments	Classification	Keywords	Sites	CD No.	
N00236 / 002103	08-23-2005	DTSC -	NO FURTHER ACTION (NFA) ON THE	ADMIN RECORD	NFA	001	SOUTHWEST	
NONE	06-23-2005	SACRAMENTO	DRAFT RECORD OF DECISION (ROD) FOR	CONFIDENTIAL	RI	029	DIVISION - BLDG.	
LTR	NONE	A. LANDIS	SKEET RANGE	INFO			1	
NONE		NAVFAC -		REPOSITORY				
00003		SOUTHWEST						
		DIVISION						
		T. MACCHIARELLA						
N00236 / 002114	09-12-2005	CRWQCB - SAN	TRANSMITTAL OF TENTATIVE ORDER	ADMIN RECORD	CLEANUP	029	SOUTHWEST	
NONE	08-26-2005	FRANCISCO	(RESCISSION OF SITE CLEANUP	INFO	RESCISSION		DIVISION - BLDG.	
LTR	NONE	J. HUANG	REQUIREMENTS) FOR SKEET RANGE AND	REPOSITORY			1	
NONE		NAVFAC -	TRAP CLUB					
00008		SOUTHWEST						
		DIVISION						
		T. MACCHIARELLA						

Total Estimated Record Page Count: 1,126

Total - Administrative Records: 37

((SUBJECT Like "**skeet**" And SUBJECT Like "**range**")) AND [UIC NUMBER]='N00236'

Attachment B

Agency Agreement Letters



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105**

December 18, 2004

Mr. Darren Newton
Department of the Navy
Program Management Office West
1230 Columbus Street, Suite 1100
San Diego, CA 92101-8571

Dear Darren:

Subject: EPA Comments on the Draft Proposed Plan for the Skeet Range at Alameda Point.

EPA has reviewed the Proposed Plan for the Skeet Range at Alameda Point and we concur with the Navy's proposal of No Further Action at this site. We do not expect the lead shot to pose an unacceptable risk to diving birds nor other ecological receptors. In addition, the shot does not pose a threat to human health.

The document is generally well written and effective. We do have the following comments on the text of the document.

1. In the future, please send the text draft before putting it in lay-out. This is an important issue that our community involvement coordinators raise with almost every proposed plan. They want to comment on the text before the layout starts to make modifications difficult.
2. The order of presentation at the beginning does not encourage public participation. The current first sentence is a bit too full of information, but the comment invitation isn't until the third paragraph. Also, the current first paragraph is loaded with acronyms that readers will likely not be able to remember as they read further. This first paragraph could begin something like:

"The US Navy encourages the public to comment on its Proposed Plan for no further action at the Alameda NAS Skeet Range (IR Site 29). The public comment period... The public meeting to receive written and verbal comments is..."

A second paragraph could contain the references to the RI, i.e., "...the Navy looked extensively at the contaminants, their location and their potential affect on plant, animals and humans in a study called a remedial investigation (RI)."

3. Some phrasing in the second paragraph does not encourage public participation: "...BRAC Cleanup Team...has determined through consultation with F&W..." This is pre-decisional language. The above sentence is also quite long (11 lines long).
4. Regarding the map, there are two yellow boxes on the western boundary that are confusing, since they have nothing to do with this proposed action. Instead, please highlight the Skeet Range.
5. There is a small formatting issue on Page 2, where the last line of the sentence seems to get lost on the second column.
6. The discussion of ecological risk assessment on pages 3 and 4 is confusing. The difference between screening and base-line risk assessments is difficult to present in a short proposed plan, and a probability distribution model is almost impossible to explain. Perhaps retain paragraphs 1 through 4, but change paragraph 5 to: "Models which took into account the field collected lead shot data, the NOAEL and exposure factors such as the amount of time that a bird spends at the site predict that an unacceptable risk is not posed to diving birds at this site". The rest of this section (except for the italicized conclusion) could then be deleted.
7. On Page 5, there is a reference to the documents being at the information repositories. Please add "(see locations listed on Page 1)".
8. The public meeting date should be held well after the holiday season is over.
9. The first page headline in red font does not encourage public participation. Although it does not use explicit pre-decisional language (instead it uses "indicate"), it does potentially send a similar message. Something like "Navy Proposes No Further Action at Skeet Range" or "Navy Comment Period Begins for Skeet Range" are possibilities.
10. The document states in a couple places that the conditions at the site do not present "a significant risk." More appropriate language based on EPA's ROD guidance is whether a site presents "an unacceptable risk".
11. The human health risk assessment section concludes that: "Risks along the adjacent shoreline are comparable to background". If this is also an acceptable risk, then please add a statement to that affect.

Please call me at (415) 972-3028 if you would like to discuss our comments on the Proposed Plan.

Sincerely,

Mark Ripperda
Remedial Project Manager



Terry Tamminen
Agency Secretary
Cal/EPA



Department of Toxic Substances Control

Edwin F. Lowry, Director
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721



Arnold
Schwarzenegger
Governor

February 9, 2005

Mr. Thomas L. Macchiarella
Southwest Division Naval Facilities Engineering Command
Attn: Code 06CA.TM
1220 Pacific Highway
San Diego, CA 92132-5190

PROPOSED PLAN, FORMER SKEET RANGE (IR SITE 29), ALAMEDA POINT, ALAMEDA, CALIFORNIA

Dear Mr. Macchiarella:

The Department of Toxic Substances Control (DTSC) appreciates the opportunity to review the advanced copy of the Proposed Plan for the above referenced site and offers the following comments:

1. The Proposed Plan should make it clear that the shoreline/beach area is not part of IR Site 29 and that it will be investigated as part of the adjoining IR Site 1.
2. DTSC does not object to a No Further Action (NFA) decision for IR Site 29 based on the information currently available as well as the relatively small size, marginal habitat, and Navy's acknowledgement that the shoreline/beach area will be investigated.
3. DTSC does not necessarily agree to certain technical issues in evaluating lead shot as part of an ecological risk assessment. Our position is outlined in the attached January 26, 2005 memorandum prepared by the Human and Ecological Risk Division (HERD).
4. DTSC considers all action pursuant to the Health and Safety Code (HSC), Chapter 6.5, Section 25200.10 and the California Code of Regulation (CCR), Title 22, Section 66264.801 have been taken at IR Site 29.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at www.dtsc.ca.gov.

Mr. Thomas Macchiarella
Page 2
February 9, 2005

Please contact me at 510-540-3767 or mliao@dtsc.ca.gov if you have any questions.

Sincerely,



Marcia Liao
Remedial Project Manager
Office of Military Facilities

Attachment

Cc (via US Mail and email):

Mr. Mark Ripperda
Remedial Project Manager
U.S. EPA Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Ms. Judy Huang, P.E.
Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

Cc (via email):

Greg Lorton, SWDiv, Gregory.Lorton@navy.mil
Darren Newton, SWDiv, Darren.Newton@navy.mil
Elizabeth Johnson, City of Alameda, ejohnson@ci.alameda.ca.us
Peter Russel, Russel Resources, peter@russellresources.com
Jean Sweeney, RAB Co-Chair, jean_sweeney@juno.com
Lea Loizos, Arc Ecology, lealoizos@mindspring.com



Alan C. Lloyd, Ph.D.
Agency Secretary
Cal/EPA



Department of Toxic Substances Control

700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721



Arnold Schwarzenegger
Governor

TO: Marcia Liao, Project Manager
OMF Berkeley Office
700 Heinz Street, Second Floor
Berkeley, CA 94704

FROM: James M. Polisini, Ph.D.
Staff Toxicologist, HERD
1011 North Grandview Avenue
Glendale, CA 91201

DATE: January 26, 2005

SUBJECT: NAVAL AIR STATION ALAMEDA (ALAMEDA POINT) FORMER SKEET
RANGE PROPOSAL FOR NO FURTHER ACTION
[SITE 201209-18 PCA 18040 H:22]

BACKGROUND

All the documents listed below were reviewed by HERD over the past month. HERD received 4 electronic documents for review regarding the Skeet Range at Naval Air Station (NAS) Alameda on January 11, 2005. These documents were:

1. Draft Skeet Range Remedial Investigation Report, Additional Response to Comments, California Department of Interior Fish and Wildlife Service, dated June 11, 2004 (fnl SKR RI AppF-3 DTSC.pdf).
2. Draft Skeet Range Remedial Investigation Report, Additional Response to Comments, U.S. Department of Interior Fish and Wildlife Service, dated December 4, 2003 (fnl SKR RI AppF-2 RTC USFWS.pdf).
3. Draft Skeet Range Remedial Investigation Report, Response to Comments (fnl SKR RI AppF-1 several.pdf), cover-page dated September 30, 2003 with a header of October 15, 2003, containing:
 - a. Draft Skeet Range Remedial Investigation Report, Response to Comments, U.S. EPA Region IX dated May 14, 2003;
 - b. Draft Skeet Range Remedial Investigation Report, Response to Comments, California Department of Toxic Substances Control dated March 5, 2003;
 - c. Draft Skeet Range Remedial Investigation Report, Response to Comments, California Regional Water Quality Control Board dated June 24, 2003 including Attachment A for the Binomial Model;

HERD also received an electronic copy of a No Further Action Briefing (Site 29 NFA Briefing.doc) complete with maps. The file has a date stamp of January 16, 2005.

The minutes of the RTC meeting December 10, 2003 regarding the NAS Alameda Skeet Range subsequently were delivered via facsimile copy on January 19, 2005.

NAS Alameda was an active naval facility from 1940 to 1997. Operations included aircraft, engine, gun and avionics maintenance; fueling activities; and metal plating, stripping and painting. An unconfined landfill exists on the margin of San Francisco Bay in the western bayside area of NAS Alameda. In addition to skeet range activities, linked storm water and industrial wastewater lines discharged to the Seaplane Lagoon in the Northwest and Northeast corners, as well as the Oakland Inner Harbor Channel side of NAS Alameda.

The skeet range is located on the northwestern boundary of Naval Air Station (NAS) Alameda and was developed offshore as two active shooting ranges (northern and southern) and operated for approximately 30 to 40 years. The skeet range was closed in 1993. The Contaminants of Concern (COCs) are lead in sediment and lead shot in addition to polycyclic aromatic hydrocarbons (PAHs) associated with clay targets and clay target fragments.

GENERAL COMMENTS

This memorandum outlines only the remaining technical concerns regarding the assessment of the ecological hazard posed by lead shot at the NAS Alameda Skeet Range. These comments are meant to define HERD's position, for the administrative record, on the major technical issues in evaluating lead shot as part of an ecological risk assessment. No response is required of the Navy or Navy contractors.

SPECIFIC COMMENTS

1. Toxicity of lead shot. There are no toxicity experiments for diving ducks, which the regulators or the Navy were able to locate, that mimic the daily exposure which would occur in the wild. Best scientific judgment was employed separately both by the Navy and HERD to develop a number of shot which would approximate a No Observable Adverse Effect Level (NOAEL) with daily intake. The Navy estimate is 2 to 9 (number 7 ½ to 9 shot), the HERD estimate is 3 to 5 (number 7 ½ to 9 shot). The Navy incorporates a 'residence time' factor for the time lead would remain circulating in the blood. HERD views the 3 to 5 shot as a single dose NOAEL (i.e. 3 to 5 number 7 ½ to 9 shot per bird). Subsequent intake of 3 to 5 shot could most likely be tolerated once lead from the initial intake cleared the bird, that is the blood lead mobile in the tissues of the bird has dropped to pre-exposure concentrations. This clearance time would be related to the 'residence time' proposed by the Navy,

but HERD is uncertain of the range of values which would be appropriate for a clearance time.

Another factor in evaluating the toxicity of lead shot is the rate or possibility of clearance. None of the references reviewed by HERD indicated whether ingested shot was cleared from the bird gastrointestinal (GI) tract. If some or all lead shot cleared the GI tract of the experimental birds demonstrating adverse effects, those adverse effects would be related to the smaller absorbed dose of lead, not the total ingested dose of lead, and the toxicity of lead shot would be greater than that estimated.

HERD notes that the median of the Navy-derived NOAEL is 3 number 7 ½ to 9 shot, similar to the HERD-derived NOAEL of 3 to 5 number 7 ½ to 9 shot. However, considerable uncertainty is inherent in the extrapolation of the dose schedule of the exposure experiments to field intake rates, retention times in the GI tract and the proportion of dives made specifically to ingest grit-size material. Because of this uncertainty, HERD continues to regard a single intake of 3 to 5 number 7 ½ to 9 lead shot as a NOAEL dose of diving ducks and other similar bottom-feeding avian species.

2. The population effect level. A population effect level of 1×10^{-3} (1 in a thousand birds) is used in the Navy assessment of the NAS Alameda Skeet Range. The USFWS agrees with the 1×10^{-3} population level effect, as presented in the minutes of the December 10, 2003 meeting. The San Francisco Regional Water Quality Control Board (SFRWQCB) has previously used 1×10^{-4} (1 in ten thousand) as a population level effect at the Castro Cove site on the Chevron Richmond Refinery. However, the SFRWQCB agreed to a determination of No Further Action (NFA) for the NAS Alameda Skeet Range based on 'limited impact on the avian population' (minutes of December 10, 2003 meeting). HERD defers to the USFWS, SFRWQCB and U.S. EPA staff members attending the December 10, 2003 meeting regarding the acceptability of the 1×10^{-3} level as reflective of an adverse population effect level.
3. Calculation of Site Use Factor (SUF). HERD agrees with the point made by the USFWS representative, in the minutes of the December 10, 2003 meeting, that the SUF is not related to the distance a bird travels to feed, but to the suitable habitat within that distance. The habitat suitable for feeding is not a dependent variable related to the geometric area encompassed by a circle with a radius of some estimate of travel distance related to feeding. HERD recommends that any SUF for birds be calculated as the fraction the site habitat represents compared to the available feeding habitat within the distance the bird species is known to travel to feed. The response that the water depth of the majority of the NAS Alameda Skeet Range is of a depth utilized by the representative species does not address the point raised. The majority of the habitat within a mean foraging range of 168 km^2 (Attachment A, Table 1) is certainly not of a depth normally foraged upon by the

representative receptor group. The Navy should investigate methods to estimate a more ecologically-based SUF for future Ecological Risk Assessments. No response is required from the Navy or the Navy contractors is required for this comment.

4. **Natural Mortality.** HERD does not necessarily agree with the comparison of natural mortality, presented as 31% of the population per year, to the estimated mortality due to ingestion of lead shot (minutes of December 10, 2003 meeting). If the age-class of the group constituting the 31% annual mortality includes mostly non-reproductive older individuals the population effect of this loss is minimal or negligible.
5. HERD does not object to a finding of No Further Action for the NAS Alameda Skeet Range. This decision is based on the USFWS description of the Skeet Range as 'exposed and windy' and unlikely to serve as a foraging area for scaups and scoters for extended periods (minutes of the December 10, 2003 meeting), a personal visit to the NAS Skeet Range on one of those days described and the concurrence of the other regulatory agencies to the ERA for lead shot for the NFA decision.

CONCLUSIONS

HERD does not object to a NFA decision for the NAS Alameda Skeet range based on the information currently available as well as the relatively small size and marginal habitat of the NAS Alameda Skeet Range.

HERD Internal Review: Michael Anderson, Staff Toxicologist
Human and Ecological Risk Division

cc: Sonce DeVries, BTAG Member
U.S. EPA Region IX
Superfund Technical Assistance
75 Hawthorne (SFD-8-B)
San Francisco, CA 94105

Charlie Huang, BTAG Member
California Department of Fish and Game
1700 K Street, Suite 250
P.O. Box 944209
Sacramento, CA 94244-2090

James Haas, BTAG Member
U.S. Fish and Wildlife
Environmental Contaminants Section
2800 Cottage Way (W-2605)
Sacramento, CA 95825

Marcia Liao
January 26, 2005
Page 5

Laurie Sullivan, BTAG Member
Coastal Resources Coordinator (H-1-2)
c/o U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

Denise Klimas, BTAG Member
8810 Folsom Blvd., 2nd Floor
P.O. Box 806
Sacramento, California 95812-0806

Ms. Julie Menack
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

818-551-2853 Voice
818-551-2841 Facsimile
C:\risk\nasa\Skeel Range RI 2005 with Letterhead.doc/h:22



California Regional Water Quality Control Board

San Francisco Bay Region

Lloyd, Ph.D.
Secretary for
Environmental
Protection

1515 Clay Street, Suite 1400, Oakland, California 94612
(510) 622-2300 • Fax (510) 622-2460
<http://www.waterboards.ca.gov/sanfranciscobay>



Arnold Schwarzenegger
Governor

Date: **MAR 23 2005**
File: # 2199:9285(JCH)

2005 MAR 28 A 9:09

BRAC OFFICE

Mr. Thomas L. Macchiarella
BRAC PMO
Attn: Code 06CA.TM
1220 Pacific Highway
San Diego, CA 92132-5190

Subject: Concurrence on No Further Action, Proposed Plan For Former Skeet Range (IR Site 29), Alameda Point, Alameda, California

Dear Mr. Macchiarella:

The San Francisco Bay Regional Water Quality Control Board (Water Board) staff reviewed the *Proposed Plan For Former Skeet Range (IR Site 29), Alameda Point, Alameda, California*, dated February 2005 (Proposed Plan). Based on discussions with Navy and City of Alameda representatives it is staff's understanding that:

1. There will be no future development at this offshore parcel. The site will remain open water.
2. The western boundary for Site 29 ends at the lower low water line. Area above lower low water, including the beach area, will be investigated, and if necessary, remediated as part of IR Site 1.

With the condition that all information presented to the Board is representative of site conditions, staff concurs that no further action is necessary at the former skeet.

Please contact me at (510) 622-2363 or email jchuang@waterboards.ca.gov if you have any questions.

Sincerely,

Judy C. Huang, P.E.
Associate Water Resource Control Engineer
Groundwater Protection and Waste Containment
Division

Cc (via US Mail and email):

Ms. Mark Ripperda
Project Manager
U.S. EPA Region IX
75 Hawthorne Street, (SFD-8-2)
San Francisco, CA 94105-3901

Ms. Marcia Liao
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, CA 94710

Dr. James Polisini
DTSC, Human & Ecological Risk
Division
1011 N. Grandview Avenue
Glendale, CA 91201

Ms. Jean Sweeney
RAB Community Co-Chair
212 Santa Clara Drive
Alameda, CA 94501

✓ Mr. Darren Newton
U.S. Navy
Southwest Division
1230 Columbia Street, Suite 1100
San Diego, CA 92101-8517

Mr. Doug Davenport
Tetra Tech EMI
135 Main Street, Suite 1800
San Francisco, CA 94105

Mr. Dan Baden
Shaw Environment and Infrastructure
4005 Port Chicago Highway
Concord, CA 94520-1120

Ms. Elizabeth Johnson
Alameda Reuse and Redevelopment
Authority
950 West mall Square, Building 1
Alameda, CA 94501

Mr. Peter Russell
Russell Resources
440 Nova Albion Way
San Rafael, CA 94903

Mr. Charlie Huang
Department of Fish and Game
1700 K Street, Room 250
P.O. Box 9444204
Sacramento, CA 94244-2090

Ms. Laurie Sullivan
NOAA
C/O U.S. EPA Region IX
75 Hawthorne Street, (H-1-2)
San Francisco, CA 94105-3901

Newton, Darren CIV (NFECSW)

From: Beckye_Stanton@fws.gov
Sent: Tuesday, June 29, 2004 10:18 AM
To: Lau, Virginia
Cc: black.ned@epa.gov; chuang@OSPR.DFG.CA.GOV; Cook.Anna-Marie@epamail.epa.gov; Newton, Darren CONT (NFECSW); EJohnson@ci.alameda.ca.us; Gunster, Donald G; james_haas@fws.gov; Judy Huang; jp_one@ix.netcom.com; KBrasaemle@TechLawInc.com; laurie.sullivan@noaa.gov; jim leather; Greg Lorton; Pound, Michael J CIV NFECSW, (EFDSW); mliao@dtsc.ca.gov; Nlf@rb2.swrcb.ca.gov; Peter.Russell@NgEnviro.com; pleinwan@dhs.ca.gov; ripperda.mark@epa.gov; ted.splitter@NgEnviro.com; Macchiarella, Thomas L CIV BRAC, (EFDSW); Tom_Suchanek@fws.gov
Subject: Re: Draft Final RI reports for Seaplane Lagoon (IR Site 17) and Skeet Range (IR Site 29)

As stated in the December 10, 2003 meeting, I concur with the Navy's determination of no further action for the skeet range and appreciate the Navy addressing our concerns through the additional Monte Carlo analysis.
Thanks, Beckye

Beckye Stanton, Ph.D.
Environmental Contaminants Division
U.S. Fish and Wildlife Service
2800 Cottage Way, Room W-2605
Sacramento, CA 95825
916-414-6733 (phone), 414-6713 / -6712 (fax)
Beckye_Stanton@fws.gov

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

ORDER NO. 93-129

SITE CLEANUP REQUIREMENTS FOR:

**ALAMEDA NAVAL AIR STATION
ALAMEDA NAVAL AIR STATION SKEET AND TRAP CLUB
ALAMEDA, ALAMEDA COUNTY**

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. **Site Description** - The Alameda Naval Air Station (hereinafter called the Discharger) operated a skeet and trap club at the station. The club is located on the west side of the City of Alameda, adjacent to San Francisco Bay and near the northwest tip of the city (see Figure 1).
2. **Site History** - The club had been in operation for about 30 to 40 years, but shooting ceased in April 1993. There are signs posted stating that no lead shot is to be used at the club, and it is the intention of the Discharger to eliminate any further discharge of lead into the bay.
3. **Sources of Pollution** - There are two shooting ranges, each with skeet and trap apparatus. The shooting positions are about 100 feet from the bay and face west toward San Francisco. The pellets can land a considerable distance, 300 to 400 feet, from the shooting positions. At this time, no estimate can be given of how much lead is in the bay. Broken clay targets also have been deposited into the bay.
4. **Environmental Concerns** - The two primary areas of concern are lead and clay target deposition. The potential effects of lead from shotgun clubs are well documented. Direct ingestion of lead pellets causes waterfowl deaths. In the San Francisco Bay area, dabbling ducks are at special risk. In both fresh and marine water, lead becomes available to biota through the transformation process of oxidation. Clay targets contain asphaltene, which in turn can contain polynuclear aromatic hydrocarbons. These types of hydrocarbons are classified as carcinogenic.
5. **Scope of this Order** - This Order contains prohibitions and tasks that require the Discharger to: 1) cease the deposition of lead shot into waters of the State or waters of the United States; 2) define the extent of lead pollution in waters of the State or waters of the United States; 3) determine the degree to which the lead is biologically available; 4) develop a remedial action plan to cleanup or manage the lead pollution; and 5) implement the remedial action plan.

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To	Thomas Hochstetler	From J. Huang
Co.	BPAC PMO	Co. SF Bay RWQCB
Dept.		Phone # 510 622-2365
Fax #	(619) 532-0983	Fax # 510 622-2457

**Site Cleanup Requirements
Alameda Naval Air Station Street and Trap Club
Page 2**

6. On October 28, 1968, the State Board adopted Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality Waters in California." This policy calls for maintaining the existing high quality of State waters unless it is demonstrated that any change would be consistent with the maximum public benefit and not unreasonably affect beneficial uses. The discharge of waste to the surface water at this site is in violation of this policy. Therefore, the surface water quality needs to be restored to its original quality to the extent reasonable.
7. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on September 16, 1992. The Basin Plan contains water quality objectives and beneficial uses for San Francisco Bay and contiguous surface waters.
8. The existing and potential beneficial uses of central San Francisco Bay and contiguous surface waters include:
 - a. Industrial service supply
 - b. Industrial process supply
 - c. Navigation
 - d. Water contact recreation
 - e. Non-contact water recreation
 - f. Ocean commercial and sport fishing
 - g. Wildlife habitat
 - h. Preservation of rare and endangered species
 - i. Fish migration
 - j. Fish spawning
 - k. Shellfish harvesting
 - l. Estuarine habitat
9. The Discharger has caused or permitted, and threatens to cause or permit, waste to be discharged or deposited where it is or probably will be discharged to waters of the State and creates a condition of pollution or nuisance.
10. This action is an Order to enforce the laws and regulations administered by the Board. This action is categorically exempt from the provisions of the CEQA pursuant to Section 15321 of the Resources Agency Guidelines.
11. The Board has notified the Discharger and interested agencies and persons of its intent under California Water Code Section 13304 to prescribe Site Cleanup Requirements for the discharge and has provided them with the opportunity for a public hearing and an opportunity to submit their written views and recommendations.

Site Cleanup Requirements
Alameda Naval Air Station Sheet and Trap Club
Page 3

12. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, that the Discharger shall cleanup and abate the effects described in the above findings as follows:

A. PROHIBITIONS

1. The discharge of wastes or hazardous materials in a manner which will degrade, or threaten to degrade, water quality or adversely affect, or threaten to adversely affect, the beneficial uses of the waters of the State or waters of the United States is prohibited.
2. Specifically, the discharge or deposition of lead shot into waters of the State or waters of the United States is prohibited.

B. PROVISIONS

1. The Discharger shall perform all investigation and cleanup work in accordance with the requirements of this Order. All technical reports submitted in compliance with this Order shall be satisfactory to the Executive Officer, and, if necessary, the Discharger may be required to submit additional information.
2. To comply with all Prohibitions of this Order, the Discharger shall meet the following compliance task and time schedule:

COMPLIANCE DATE AND TASKS

- a. **COMPLIANCE DATE: December 1, 1993**

WORKPLAN FOR BIOLOGICAL CHARACTERIZATION:

Submit a technical report acceptable to the Executive Officer containing a proposal, including a time schedule, to characterize the biology in the area where the lead has been deposited, and determine whether the lead has become biologically available and is affecting, or can potentially affect, plants or animals.

**Site Cleanup Requirements
Alameda Naval Air Station Shoot and Trap Club
Page 4**

- b. **COMPLIANCE DATE:** To be established by Executive Officer based on proposal submitted pursuant to Provision 2.a.

COMPLETION OF BIOLOGICAL CHARACTERIZATION:

Submit a technical report acceptable to the Executive Officer documenting completion of the necessary tasks identified in the technical report acceptable for Provision 2.a.

- c. **COMPLIANCE DATE:** May 2, 1994

WORKPLAN FOR SEDIMENT POLLUTION

CHARACTERIZATION: Submit a technical report acceptable to the Executive Officer containing a proposal, including a time schedule, to define the horizontal and vertical extent of lead sediment pollution, including both pellet and finely divided forms.

- d. **COMPLIANCE DATE:** To be established by Executive Officer based on proposal submitted pursuant to Provision 2.c.

COMPLETION OF SEDIMENT CHARACTERIZATION:

Submit a technical report acceptable to the Executive Officer documenting completion of the necessary tasks identified in the technical report acceptable for Provision 2.c.

- e. **COMPLIANCE DATE:** To be established by Executive Officer based on reports submitted pursuant to Provisions 2.b. and 2.d.

REMEDIAL ACTION PLAN: Submit a technical report acceptable to the Executive Officer containing a remedial action plan and an implementation time schedule. This report shall evaluate the removal of lead deposits in San Francisco Bay and, possibly, the adjacent land areas. Removal evaluation shall consider pellet and sediment phases, and the degree of removal may be based on biological data.

- f. **COMPLIANCE DATE:** To be established by Executive Officer based on proposal submitted pursuant to Provision 2.e.

COMPLETION OF REMEDIAL ACTION: Submit a technical report acceptable to the Executive Officer documenting the completion

**Site Cleanup Requirements
Alameda Naval Air Station Sheet and Trap Club
Page 5**

of the necessary tasks identified in the technical report acceptable for
Provision 2.e.

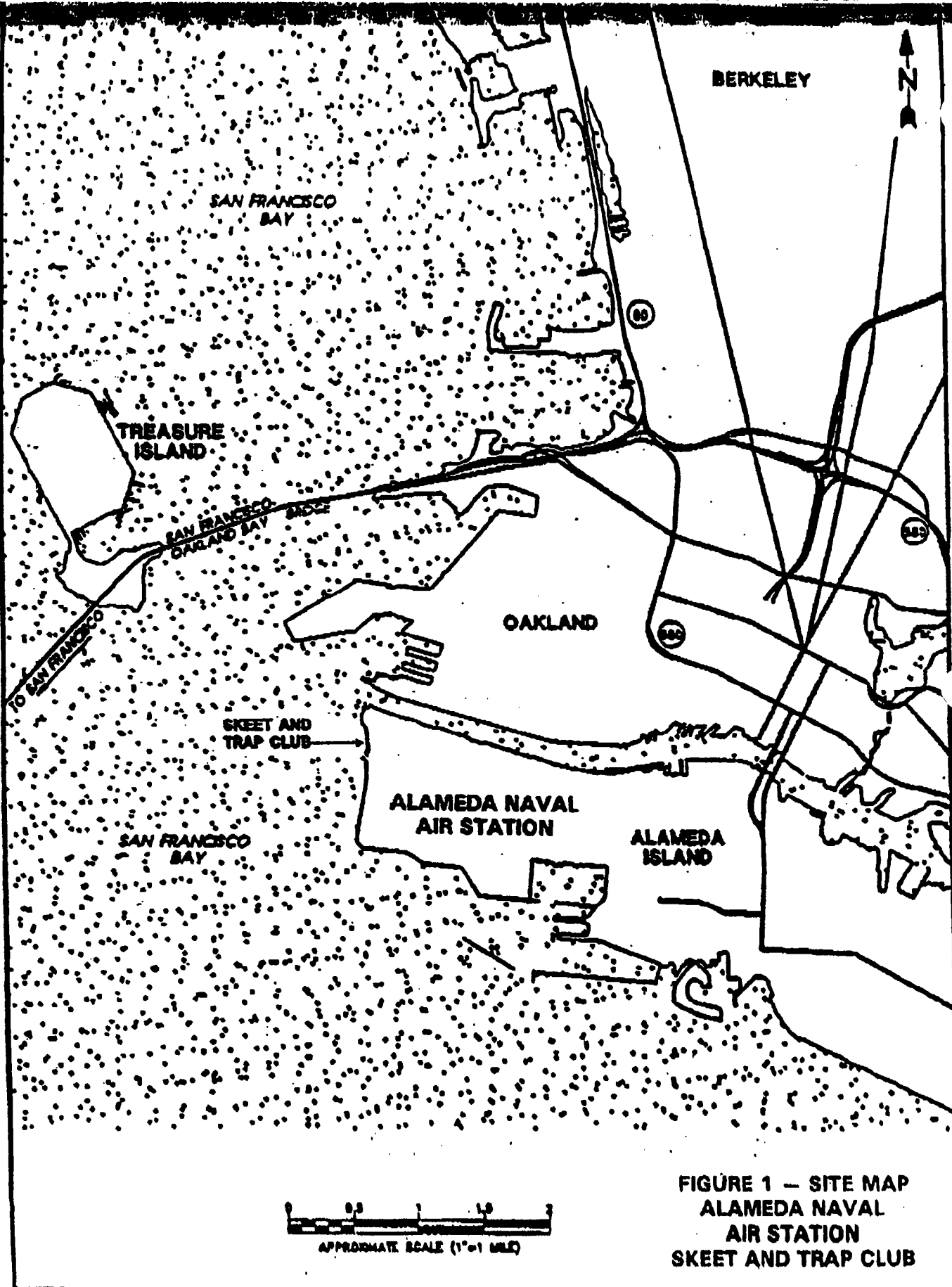
3. If the Discharger is delayed, interrupted or prevented from meeting one or more of the compliance dates specified in this Order, the Discharger shall promptly notify the Executive Officer, and the Board may consider revision to this Order.
4. The Discharger shall file a report with the Board at least 30 days in advance of any changes in occupancy or ownership associated with the Site described in this Order.
5. The Board will review this Order periodically and may revise the requirements or compliance schedule when necessary.

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Region, on October 20, 1993.



Steven R. Ritchie
Executive Officer

Attachments: Figure 1 — Site Map



**FIGURE 1 — SITE MAP
ALAMEDA NAVAL
AIR STATION
SKEET AND TRAP CLUB**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

June 13, 2005

Mr. Darren Newton
Department of the Navy
Program Management Office West
1230 Columbus Street, Suite 1100
San Diego, CA 92101-8571

Dear Darren:

Subject: EPA Comments on the Draft Record of Decision for the Skeet Range at Alameda Point.

EPA has reviewed the Draft Record of Decision for the Skeet Range at Alameda Point and we concur with the Navy's proposal of No Further Action at this site. The results of the Remedial Investigation and Risk Assessments have shown that the lead shot and polycyclic aromatic hydrocarbons (PAHs) found at this site do not pose an unacceptable risk to either humans or potential ecological receptors such as diving water fowl. The type and concentration levels of the PAHs are similar to surrounding ambient conditions and the lead shot is found approximately 80 feet offshore. The lead shot is not breaking down and hence, is not readily bio-available. Diving water fowl are not expected to ingest a sufficient quantity of whole pellets to be adversely affected.

The document follows the format of the EPA guidance: *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents*, and includes all of the necessary elements for a No Further Action Record of Decision.

Please call me at (415) 972-3028 if you would like to discuss this Draft Record of Decision.

Sincerely,

A handwritten signature in black ink, which appears to read "Mark Ripperda", is written over a horizontal line.

Mark Ripperda
Remedial Project Manager

cc: Marcia Lau, DTSC
Judy Huang, RWQCB
Peter Russell, Russell Resources



California Regional Water Quality Control Board

San Francisco Bay Region



Arnold Schwarzenegger
Governor

Jan C. ...yd, Ph.D.
Secretary for
Environmental
Protection

1515 Clay Street, Suite 1400, Oakland, California 94612
(510) 622-2300 • Fax (510) 622-2460
<http://www.waterboards.ca.gov/sanfranciscobay>

Date: **JUN 16 2005**
File: 2199.9285(JCH)

Mr. Thomas L. Macchiarella
BRAC PMO
Attn: Code 06CA.TM
1220 Pacific Highway
San Diego, CA 92132-5190

Subject: Comments on the Draft Record of Decision for Skeet Range (Installation Restoration Site 29), Alameda Point, Alameda, California

Dear Mr. Macchiarella:

The San Francisco Bay Regional Water Quality Control Board (Water Board) staff reviewed the *Draft Record of Decision for Skeet Range (Installation Restoration Site 29), Alameda Point, Alameda, California*, dated April 20, 2005 (Draft ROD) and concurs with the conclusion that no further action is needed at this site.

The Installation Restoration (IR) Site 29 is located on the northwestern corner of former NAS Alameda. IR Site 29 extends offshore into the San Francisco Bay with dimensions of about 1,300 feet by 800 feet. The primary site-related contaminants are lead shots and polycyclic aromatic hydrocarbons (PAHs) from the clay targets located approximately 80 feet offshore. The results of the Remedial Investigation and Risk Assessments have shown that the lead shot and PAHs found at this site do not pose an unacceptable risk to either humans or potential ecological receptors such as diving waterfowl.

Staff intends to recommend to the Executive Officer of the Water Board to sign the Record of Decision, provided Department of Toxic Substances Control, the lead State Agency for Alameda Point, does not have significant and substantial comments. Please contact me at (510) 622-2363 or email jchuang@waterboards.ca.gov if you have any questions.

Sincerely,

Judy C. Huang, P.E.
Associate Water Resource Control Engineer
Groundwater Protection and Waste Containment
Division

Cc (via US Mail and email):

Mr. Mark Ripperda
Project Manager
U.S. EPA Region IX
75 Hawthorne Street, (SFD-8-2)
San Francisco, CA 94105-3901

Ms. Marcia Liao
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, CA 94710

Mr. Darren Newton
U.S. Navy
Southwest Division
1230 Columbia Street, Suite 1100
San Diego, CA 92101-8517



Alan C. Lloyd, Ph.D.
Agency Secretary
Cal/EPA



Department of Toxic Substances Control

8800 Cal Center Drive
Sacramento, California 95826-3200



Arnold Schwarzenegger
Governor

June 23, 2005

Mr. Thomas L. Macchiarella
Southwest Division Naval Facilities Engineering Command
Code 06CA.TM
1220 Pacific Highway
San Diego, California 92132-5190

DETERMINATION OF NO FURTHER ACTION, INSTALLATION RESTORATION SITE 29, SKEET RANGE, ALAMEDA POINT, ALAMEDA, CALIFORNIA

Dear Mr. Macchiarella:

The Department of Toxic Substances Control (DTSC) has reviewed the draft Record of Decision (ROD), dated April 20, 2005, for Installation Restoration (IR) Site 29 at Alameda Point. The draft ROD documents the Navy's conclusion that the site does not pose unacceptable risk to human health or the environment, and that no remedial action is needed at this site.

DTSC, based on the review of the Remedial Investigation Report dated July 2004, has determined that the site characterization conducted to date supports the conclusion that no further action (NFA) is appropriate for IR Site 29. This determination is based on the following understanding that:

- IR Site 29 will remain open water and there will be no future development at this offshore parcel.
- The shoreline and nearshore areas adjacent to IR Site 29 will be addressed as part of IR Site 1 and the Offshore Sediment Study.

Please be advised that this NFA determination is based on existing information available to DTSC at this time. In the event that new information indicating environmental concerns is identified, DTSC reserves the right to require additional investigation and possible remediation as the situation warrants.

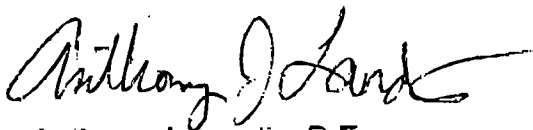
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Mr. Thomas L. Macchiarella
June 23, 2005
Page 2

Please feel free to contact Marcia Liao, of my staff, at (510) 540-3767 or mliao@dtsc.ca.gov should you have any questions.

Sincerely,



Anthony J. Landis, P.E.
Chief
Northern California Operations
Office of Military Facilities

cc: Ms. Elizabeth Johnson
950 W. Mall Square, Building 1
Alameda Point
Alameda, California 94501

Dr. Peter Russell
Russell Resources, Inc.
440 Nova Albion Way, Suite 1
San Rafael, California 94903-3634

Ms. Lea Loizos
Arc Ecology
833 Market Street, Suite 1107
San Francisco, California 94103

Mr. Greg Lorton
~~Southwest Division Naval Facilities Engineering Command~~
Code 06CA.GL
1220 Pacific Highway
San Diego, California 92132-5190

Mr. Darren Newton
Southwest Division Naval Facilities Engineering Command
Code 06CA.DN
1220 Pacific Highway
San Diego, California 92132-5190

Mr. Thomas L. Macchiarella
June 23, 2005
Page 3

cc: Mr. and Mrs. Jim Sweeney
RAB Community Co-Chair
212 Santa Clara Avenue
Alameda, California 94501

Mr. Mark Ripperda
US Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, California 94105

Ms. Judy Huang
Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, California 94612

Attachment C

Transcript of Public Meeting and Comments Received on the Proposed Plan

1
2
3
4
5 PROPOSED PLAN FOR FORMER SKEET RANGE (IR SITE 29)
6
7
8

9 ALAMEDA POINT, CALIFORNIA

10 PUBLIC MEETING
11

12
13 Monday, March 7, 2005
14

15
16 Alameda City Hall West
17 950 W. Mall Square
18 Building 1
19 Community Conference Room
20 Alameda Point, California

21
22 COPY

23 Reported by: Valerie E. Jensen, CSR No. 4401
24

25

JAN BROWN & ASSOCIATES
CERTIFIED SHORTHAND REPORTERS
476 Jackson Street, 2nd Floor
San Francisco, California 94111
(415) 981-3498

P A R T I C I P A N T S

PRESENTERS:

THOMAS MACCHIARELLA, Navy BRAC Environmental
Coordinator
DARREN NEWTON, Navy Remedial Project Manager

OTHER AGENCY, NAVY STAFF AND CONSULTANT REPRESENTATIVES:

JENNIFER HOLDER, Ph.D., Blasland, Bouck & Lee, Inc.
JILL VOTAW, Navy Public Affairs Officer
MARCIA LIAO, Department of Toxic Substances Control
JUDY HUANG, Regional Water Quality Control Board
MARK RIPPERDA, Environmental Protection Agency
DAVID COOPER, Environmental Protection Agency
PETER RUSSELL, Russell Resources, Inc. (ARRA)

COMMUNITY MEMBERS AND INTERESTED PARTIES:

PATRICK LYNCH, Alameda Resident

TETRA TECH SUPPORT STAFF:

TOMMIE JEAN DAMREL, Tetra Tech EMI
DOUG DAVENPORT, Tetra Tech EMI
JARED SMITH, Tetra Tech EMI
CRAIG HUNTER, Tetra Tech EMI

1 MARCH 7, 2005

6:45 P.M.

2

3 MR. MACCHIARELLA: Okay. Let's go ahead
4 and get started.

5 Welcome, everybody, to the Site 29, or
6 Skeet Range, public meeting for the Proposed Plan.

7 There were some handouts at the door. I
8 hope you all got them -- an agenda, public comment
9 form, the Proposed Plan itself.

10 I'd like to mention that the meeting is
11 being recorded, and a transcript will appear in the
12 admin record and information repositories. And,
13 also, please sign in.

14 My name is Thomas Macchiarella, and I
15 represent the Navy through the BRAC Program Management
16 Office West. We report to the Assistant Secretary of
17 the Navy Installations and Environment.

18 I've been delegated the authority and
19 responsibility for conducting the environmental
20 restoration activities through the Installation
21 Restoration Program here at Alameda Point. And I
22 really want to thank you for taking your time to be
23 here tonight.

24 Now, the Installation Restoration Program
25 for Alameda Point is managed by the BRAC PMO West,

1 as I mentioned. We also have significant support
2 from the Navy's Facilities Engineering Command,
3 Southwest Division, which is essentially a large
4 group of engineers and specialists who provide
5 expertise to Naval shore facilities.

6 Before I go any deeper, let me walk
7 through the agenda.

8 Right now we're going through an overview
9 of the Navy's Installation Restoration Program.
10 Right after that we're going to go into a more
11 detailed summary of the Proposed Plan by Mr. Darren
12 Newton.

13 And then, after that, we'll open it up for
14 clarifying questions. We can address any questions
15 that you have on the Proposed Plan or the facts leading
16 up to the Proposed Plan for Site 29.

17 Then, after that, we'll convert into listening
18 mode and accept public comment. And, again, those will
19 still be recorded. And those public comments will be
20 addressed in the Navy's Responsiveness Summary in the
21 Record of Decision. And we'll be here until 8 o'clock
22 accepting comments.

23 The purpose of the Navy's IR program and
24 what is the Installation Restoration Program.

25 Basically, it boils down to we identify,

1 investigate, assess and characterize hazardous
2 substances and clean them up where necessary at
3 this facility, Alameda Point.

4 You may have heard of Super Fund. That is
5 essentially CERCLA, the Comprehensive Environmental
6 Response, Compensation and Liability Act. We'll
7 be using that "CERCLA" term a few times in the
8 presentation. Essentially, we want to get all our
9 sites into a site complete or site closeout mode.

10 Here is the CERCLA process or the Installation
11 Restoration Program.

12 It should show up in your handout. Hopefully,
13 you can see it from there.

14 The Preliminary Assessment is the initial
15 steps. Sometimes it's combined with the SI. The
16 Preliminary Assessment, or PA, is where we identify an
17 area that could have some environmental concerns through
18 research of all types.

19 A Site Inspection is where we verify whether or
20 not there has been a release there through initial soil
21 sampling.

22 The Remedial Investigation and Feasibility
23 Studies are sometimes combined. The RI is where we
24 conduct detailed site studies and completely investigate
25 a site, completely delineate the plumes and also conduct

1 Human and Ecological Risk Assessments.

2 The Feasibility Study comes right after
3 that. That's where we develop cleanup solutions or
4 alternatives and evaluate the alternatives against a
5 set of criteria, a consistent set of criteria.

6 And the Proposed Plan, which is where we
7 are right now with Site 29, is where we propose
8 an alternative or a solution, and the public and
9 regulatory agencies provide input.

10 The Record of Decision is an official
11 document that both the Navy and the EPA will sign
12 in this case of Alameda Point. In some instances,
13 perhaps other regulatory agencies. The Record of
14 Decision documents the selected remedy which was
15 chosen.

16 After the ROD, the Remedial Design/Remedial
17 Action phases are where we conduct the cleanup action
18 or monitoring or engineering controls or land use
19 controls. And remedial actions could consist of
20 long-term maintenance. And eventually all of the
21 sites will achieve a site completion and a no further
22 action or site closeout designation.

23 We're still talking about the Installation
24 Restoration Program in general of Alameda Point, so
25 you can put Site 29 in context. At Alameda Point

1 we have 35 specific sites listed in the Installation
2 Restoration Program ranging from a landfill, to service
3 stations, to debris areas.

4 Alameda Point, previously known as the
5 Naval Air Station Alameda, is listed on the National
6 Priorities List. Therefore, the United States EPA
7 is the lead regulatory agency. In cases where the
8 facilities are not on the National Priorities List,
9 California EPA would likely be the lead regulatory
10 agency.

11 Being listed on the NPL, we also have the
12 Federal Facilities Agreement between the U.S. EPA
13 and the Navy. This FFA essentially spells out how
14 the EPA and the Navy interact in conducting the
15 response actions and outlines processes for items
16 such as funding, prioritization and time tables.

17 The Alameda Point has a BRAC Cleanup Team
18 which consists of four members -- a member from the
19 Navy, the U.S. EPA, the California Department of Toxic
20 Substances Control and the San Francisco Bay Regional
21 Water Quality Control Board. Those members are in this
22 room tonight.

23 Also, for Alameda Point Base, on the FFA's
24 requirements, we have a site management plan, which is
25 essentially a detailed schedule for all of our sites

1 in the IR program.

2 Yearly updates for that schedule are required.
3 And we often do them more frequently for the benefit of
4 the BRAC Cleanup Team.

5 Back to Site 29.

6 The Proposed Plan is where we are now. The
7 Proposed Plan provides for community involvement. At
8 Alameda Point we have additional areas for community
9 involvement; namely, the Restoration Advisory Board,
10 which meets monthly. That's above and beyond what is
11 required for CERCLA.

12 The Proposed Plan proposes a decision and
13 leads to the Record of Decision. Of course, we'll go
14 into more detail on the specifics of Site 29 in the
15 next presentation.

16 So I'd like to point out that our RAB
17 meetings are open to the public, and they are typically
18 held on the first Thursday of the month downstairs in
19 this building. The purpose of the RAB is to provide
20 advice to the BRAC Cleanup Team and to the Navy and to
21 also act as a conduit of information to the community
22 at large.

23 We have our Navy environmental web site
24 listed on many of our handouts and fact sheets, and
25 you can find out more information about the Restoration

1 Advisory Board there.

2 Before we move on to the next item on the
3 agenda, which is the Proposed Plan Summary, are there
4 any questions on the general Installation Restoration
5 Program?

6 Thank you.

7 Mr. Darren Newton.

8 MR. NEWTON: Thank you.

9 Thank you all for coming this evening.

10 I am Darren Newton. I'm the remedial project
11 manager for the BRAC Program Management Office West, and
12 I'm here to talk about the Installation Restoration for
13 the Site 29 Proposed Plan. And I'm going to provide a
14 Proposed Plan Summary.

15 There are a couple poster boards over there
16 to be viewed, if you would like.

17 I'd like to go over a short agenda.

18 I want to talk about where the location is,
19 the history of the site, a brief summary of previous
20 investigations and then the site-specific IR process.

21 I'll talk about the complete CERCLA
22 (indicating) process and talk about the site specific.
23 Then I'll discuss briefly the ecological risk
24 assessment, which will then lead me to the Human
25 Health Risk Assessment, and then, following, the

1 conclusions based on the previous investigations
2 and then end with the next steps.

3 So this is the site location. This is
4 an aerial photograph from the U.S. Geological Survey
5 downloaded from the web site. That is at the bottom,
6 terraserver@microsoft.com. It's from 1993. It's on
7 the northwestern side of Alameda. Its approximate
8 location is depicted here on this photograph.

9 A short history of the site.

10 The site is located on the northwest corner
11 of Alameda. There were two main shooting ranges -- the
12 northern and southern range. They were actively used
13 for 30 to 40 years.

14 Lead shot and clay target fragments are
15 present in offshore sediments. Lead shot discharged
16 from guns towards clay pigeons projected westerly over
17 the San Francisco Bay. They're concentrated offshore
18 approximately 1300 by 800 feet in water depths ranging
19 from 5 to 12 feet mean low low water.

20 Identified as a site-specific concern
21 following the 1994 Ecological Assessment were
22 concerns about wildlife exposure to polynuclear
23 aromatic hydrocarbons -- also known as PAHs -- and
24 lead.

25 Let me go through the 1996 and 1998 Skeet

1 Range Site Evaluations.

2 The purpose was to evaluate the density of
3 lead shot in sediment samples collected throughout
4 the site and determine whether lead from the shot is
5 biologically available. The conclusions were density
6 is highest where the shooting ranges overlap and
7 lead is not dissolving in quantities that would cause
8 adverse impacts to the environment.

9 Following along with the 2001 Skeet Range
10 Site Evaluation.

11 The purpose was to evaluate the vertical
12 distribution of lead shot and determine if PAHs present
13 at the site are associated with clay pigeon fragments.
14 The conclusion of that study is the majority of lead
15 shot is buried below five centimeters, and the PAHs
16 in sediments are primarily associated with other
17 background sources from throughout the San Francisco
18 Bay Area and not associated with the clay targets.

19 The 2004 remedial Investigation was
20 performed under CERCLA and included the Human Health
21 and Ecological Risk Assessment.

22 The site-specific IR process.

23 As Tom talked about earlier, we started
24 with a PA/SI and reviewed the potential contamination
25 at Alameda Point, identified specific areas of concern

1 following the 1994 Ecological Assessment. That fell on
2 to the Remedial Investigation that was conducted from
3 1992 through 2004.

4 At the end of that we reviewed the
5 Ecological and Human Health Risk Assessments. And
6 based on the Human Health Risk Assessments, potential
7 current and future risks associated with exposure
8 to the sediments at the site are insignificant.
9 Therefore, a Feasibility Study was not applicable
10 and was not conducted.

11 So we are here. We're at the No Further
12 Action Proposed Plan, slash, Public Comment Meeting.
13 At this point the public has the opportunity to comment
14 on the Navy's recommendation for no further action.
15 And then to be done is the Record of Decision. And the
16 final decision for the CERCLA and the responses to the
17 public comments are documented in the final Record of
18 Decision.

19 The Ecological Risk Assessment was conducted,
20 and a conceptual site model was developed to identify
21 ecological receptors, exposure pathways and chemicals
22 of concerns. Diving ducks were identified as the
23 primary ecological receptor. Lead shot and PAHs were
24 identified as the Preliminary Chemicals of Potential
25 Concern. That's COPC.

1 A detailed analysis was conducted to
2 evaluate the potential for diving ducks to ingest
3 lead shot while foraging. And the results demonstrated
4 that less than one in one thousand birds would be at
5 risk.

6 The conclusion of the Ecological Risk
7 Assessment is there are no unacceptable ecological
8 risks in the sediments offshore of the former Skeet
9 Range and the ecological community is not impacted.

10 The Human Health Risk Assessment was
11 conducted.

12 A conceptual site model was developed to
13 identify potential exposure pathways through which
14 humans might be exposed. We have recreational users
15 and workers.

16 The conclusion is no complete exposure
17 pathways identified. Direct human exposures, such
18 as dermal contact or ingestion of sediment, are
19 very limited because site-related contaminants
20 are located approximately 80 feet offshore in
21 water depths of greater than 5 feet. And the
22 indirect human exposure, such as eating fish exposed
23 to the site-related contaminants, is unlikely because
24 neither lead nor PAHs are known to be retained in the
25 edible tissues of exposed fish.

The conclusions, based on previous investigations, are future and current conditions at the site do not pose an unacceptable risk to humans or the environment. Therefore, no land use restrictions, environmental monitoring or RCRA corrective actions are required at the site.

The Navy, together with the EPA, the Department of Toxic Substance Control and the Regional Water Quality Control Board recommend no further action is warranted. The Navy's Proposed Decision is no further action for the site.

The next steps.

This is an opportunity for the community's involvement. We have this public meeting, March 7, 2005, and the public comment period for the Proposed Plan February 15 through March 18, 2005. Following the public meeting, we will move into the Record of Decision, which will include consideration of public comments.

And that's it for my site-specific Proposed
Plan Summary.

MR. MACCHIARELLA: Thank you, Mr. Newton.

The next item is clarifying questions.

Do we have any questions before we move on to public comments? We can try our best to answer them.

1 No questions.

2 Okay. The next item is public comment.

3 Between now and 8 o'clock we'll be here, in listening
4 mode, receiving public comments. We'll record them,
5 of course, and address them in our Responsive Summary.

6 Do we have any comments right now?

7 Please stand up and allow the court reporter
8 to hear.

9 MR. LYNCH: It was in July of 1999 that
10 this site was listed on the National Priorities List,
11 primarily to expedite cleanup that was not occurring
12 under the BRAC Cleanup Program that was initiated in
13 1983.

14 I'm really disappointed that the first
15 Proposed Plan for this site is a location that
16 couldn't be further away from neighboring residential
17 neighborhoods. It really raises an environmental
18 justice concern to me when we see resources being
19 spent on this offshore area again without addressing
20 contamination that exists on the fence line and
21 potentially off site.

22 I took a quote from a document called
23 "Defense Conversion, A Road Map For Communities."
24 This was produced by the East Bay Conversion and
25 Reinvestment Commission in 1996. I think it really

1 states very eloquently why I have a problem with this
2 Proposed Plan.

3 "Environmental justice has not been
4 served by so-called scientific studies and technical
5 risk assessments; in part, because they have not
6 incorporated a meaningful role for effective
7 communities."

8 I'm not surprised that I'm the only
9 community member here. Who's going to come in here
10 and discuss Monte Carlo simulations and probability?
11 I mean, those are things that were discussed at a
12 SeaTac conference in 2003, where they gave a
13 presentation on the work here. They were also
14 presented at a 2004 international conference in Venice,
15 Italy.

16 You know, I don't see the point in spending
17 limited cleanup dollars performing this kind of research
18 at this facility when there is no meaningful cleanup
19 occurring.

20 And, you know, I'm also concerned that this
21 is a proposal to leave this contamination at the site
22 of a proposed public beach. We'll spend between 150
23 million and 500 million dollars, largely to prevent
24 contamination on this base from making its way into
25 the bay.

1 We have clearly-defined contamination in
2 the bay, and we're not willing to remove it. Maybe
3 it's too expensive. But we don't know that, because
4 we're not willing to do a Feasibility Study and
5 produce a cost estimate of what it would cost to do
6 that remediation.

7 And it might be that this contamination will
8 pose a risk in the future, but because we're not going
9 to do a Record of Decision where we recognize we're
10 leaving toxic material in the bay, there's not going to
11 be a five-year follow-up.

12 And so, you know, I really think that we need
13 to do the complete step. We need to do the Feasibility
14 Study, demonstrate that this is cost prohibitive. And
15 I think we need to reach a Record of Decision where
16 there will be some review of the decision.

17 I've been involved in a lot of clean-ups,
18 sites where -- one of the base cleanup members here
19 on another Navy base, DTSC closed a waste oil tank,
20 and then it was discovered that waste oil tank is the
21 source of contamination over a large area of the base.

22 So, again, you know, people make mistakes.
23 I think, for that reason, there really needs to be a
24 five-year review on this particular site.

25 MR. MACCHIARELLA: Thank you, sir.

1 Would you like to state your name and
2 address for the record?

3 MR. LYNCH: It's Patrick Lynch, Alameda,
4 California.

5 MR. MACCHIARELLA: Any other comments?
6 Sir?

7 MR. RUSSELL: My name is Peter Russell.
8 I'm an environmental advisor for the Alameda Reuse
9 and Redevelopment Authority. Most people call it
10 "ARRA." It's easier to handle.

11 We're going to be submitting written
12 comments, and I'm simply going to paraphrase them now.

13 The gist is a single comment; that is, that
14 the shoreline is slated to be a public beach, and we
15 want to make sure there are no gaps in the evaluation
16 so that recreational use would be compromised.

17 There are two brief passages out of the
18 Proposed Plan that I would like to read that leave
19 me with a little bit of wonder about whether that is
20 going to be fully addressed by either IR 29 or IR 1.
21 The first is on Page 2 -- and I will quote it -- in
22 the righthand side column. "As a result, lead shot, as
23 well as clay target fragments, reside in the offshore
24 sediment adjacent to the Skeet Range concentrated in
25 an offshore area approximately 1300 feet by 800 feet in

1 average water depths ranging from 5 to 12 feet mean low
2 low water."

3 It should be "lower low water," but that's
4 not...

5 "The adjacent shoreline beach areas will be
6 investigated as part of IR Site 1."

7 Then on Page 5 in the lefthand column
8 there's a sentence, "However, the primary site-related
9 contaminants (lead shot and PAHs from the clay targets)
10 are located approximately 80 feet offshore in water
11 depths ranging -- averaging 5 feet or greater."

12 So I think the possible gap is not the
13 beach itself, which I think, quite clearly, will be
14 picked up by IR 1, but the water that is 5 feet deep
15 and shallower that runs from the beach itself out to
16 the 80 feet offshore where the IR 29 proper begins.
17 I think that needs to be looked at to verify that
18 there are no unacceptable health hazards -- human
19 health hazards -- for recreational land use.

20 MR. MACCHIARELLA: Thank you.

21 MR. RUSSELL: The written comments would be
22 sufficient. You don't have to respond to both sets.

23 MR. MACCHIARELLA: Thank you.

24 Any other comments?

25 Okay. Then I think we can sort of rest.

1 We'll be here until 8 o'clock if any other
2 public members come in and want to comment.

3 (Off the record at 7:06 p.m.)

4 ///

5 ///

6 ///

7 (Back on the record at 8 p.m.)

8 MR. MACCHIARELLA: Let the record show that
9 we, at 8 o'clock, completed the public comment period
10 of this meeting. And public comments will be accepted
11 until March 18th.

12 Thank you, everyone, for coming.

13 (Off the record at 8 p.m.)

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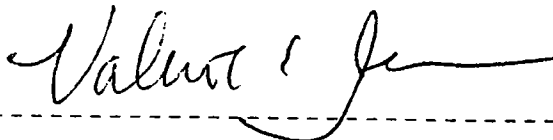
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STATE OF CALIFORNIA) SS.

I do hereby certify that the meeting was held at the time and place therein stated; that the statements made were reported by me, a certified shorthand reporter and disinterested person, and were, under my supervision, thereafter transcribed into typewriting.

And I further certify that I am not of counsel or attorney for either or any of the participants in said hearing nor in any way personally interested or involved in the matters therein discussed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal of office this 9th day of March 2005.



VALERIE E. JENSEN

Certified Shorthand Reporter

Alameda Reuse and Redevelopment Authority

Alameda Point/NAS Alameda
950 W. Mall Square - Building 1
Alameda, CA 94501-5012

(510) 749-5800
Fax: (510) 521-3764

Governing Body

Beverly Johnson
Mayor, City of Alameda
City of Alameda

March 17, 2005

Marie Gilmore
Councilmember/Community
Improvement Commissioner
City of Alameda

Tony Daysog
Councilmember/Community
Improvement Commissioner
City of Alameda

Frank Matarrese
Councilmember/Community
Improvement Commissioner
City of Alameda

Doug deHaan
Councilmember/Community
Improvement Commissioner
City of Alameda

William C. Norton
Acting City Manager/
Executive Director

Mr. Thomas Macchiarella
BRAC Environmental Coordinator
Program Management Office West
1230 Columbia Street, Suite 1100
San Diego, CA 92101-8571

Re: Proposed Plan for Skeet Range (IR Site 29), Alameda Point, Alameda

Dear Mr. ~~Macchiarella~~ ^{Thomas}:

The Alameda Reuse and Redevelopment Authority (ARRA) is pleased to have this opportunity to comment on Navy's February 2005 *Proposed Plan for Skeet Range (IR Site 29), Alameda Point, Alameda*. It is gratifying for this site to have reached the Proposed Plan milestone, near the end of the CERCLA decision-making process. ARRA has one comment, as detailed below.

Land use plans for Alameda Point include a future, public beach in the vicinity of the Skeet Range. Remediation of this area must be sufficiently thorough to allow unrestricted recreational land use, without unacceptable human health risks. The *Proposed Plan* does not acknowledge this remedial goal.

Please state clearly that both the beach area and the submerged lands shoreward of the footprint addressed by this Proposed Plan will be included in the remedial decisionmaking for IR Site 1.

The *Proposed Plan* states "lead shot as well as clay target fragments ... reside in the offshore sediment adjacent to the Skeet Range, concentrated in an offshore area approximately 1,300 feet by 800 feet in average water depths ranging from 5 to 12 feet mean [lower] low water. The adjacent shoreline beach areas will be investigated as part of IR Site 1." (page 2) Further, "the primary site-related contaminants (lead shot and PAHs from the clay targets) are located approximately 80 feet offshore, in water depths averaging 5 ft or greater." (page 5) The *Proposed Plan* does not clearly state that the scope of remedial decisionmaking for IR Site 1 includes not only the "shoreline beach areas" but also the submerged area within 80 feet of the shoreline. If contaminated sediments are present in relatively-shallow near-shore areas, unacceptable human health risks may occur from recreational use.

If you have any questions or need additional information, please call me or Dr. Peter Russell at (415)492-0540.

Sincerely,

A handwritten signature in black ink, reading "Debbie Potter". The signature is fluid and cursive, with the first name "Debbie" being more prominent than the last name "Potter".

Debbie Potter
Base Reuse and Redevelopment Manager

cc: Peter Russell, Ph.D., P.E., Russell Resources, Inc.
Elizabeth Johnson, City of Alameda
Mark Ripperda, EPA
Judy Huang, RWQCB
Marcia Liao, DTSC

Public Comment Form

Proposed Plan – Site 29, Former Skeet Range Alameda Point, California

2005 MAR 20 P
OFFICE

There are several ways to offer comments on the Proposed Plan for Site 29 Former Skeet Range. You may provide verbal comments at tonight's meeting, or you may provide written comments by March 18, 2005. To provide written comments, you may use this form and drop it at the registration desk at tonight's meeting or:

- Mail to Mr. Thomas Macchiarella, 1230 Columbia Street, Suite 1100, San Diego, CA 92101-8517
- Fax to Mr. Thomas Macchiarella at (619) 532-0940

Mailed comments must be postmarked no later than March 18, 2005.

(SEE ATTACHED)

Use reverse side or additional sheet, if necessary.

OPTIONAL:

Name: GEORGE B. HUMPHREYS

E-mail: _____

Address: 25 CAPTAINS DRIVE

Affiliation: _____

City/State/Zip: ALAMEDA, CA 94502-6417

Phone Number: _____

☒ Local Resident; years lived in the area: 20

☒ RAB Member

☐ Environmental Organization

☒ Public Official **HOUSING & BUILDING CODE
HEARING & APPEALS BOARD**
☐ Federal/State/Local Government Agency
☐ Other (please specify) _____

Would you like to be added to the Alameda Point mailing list? ____ Yes ____ No

If yes, please make sure to complete address above.

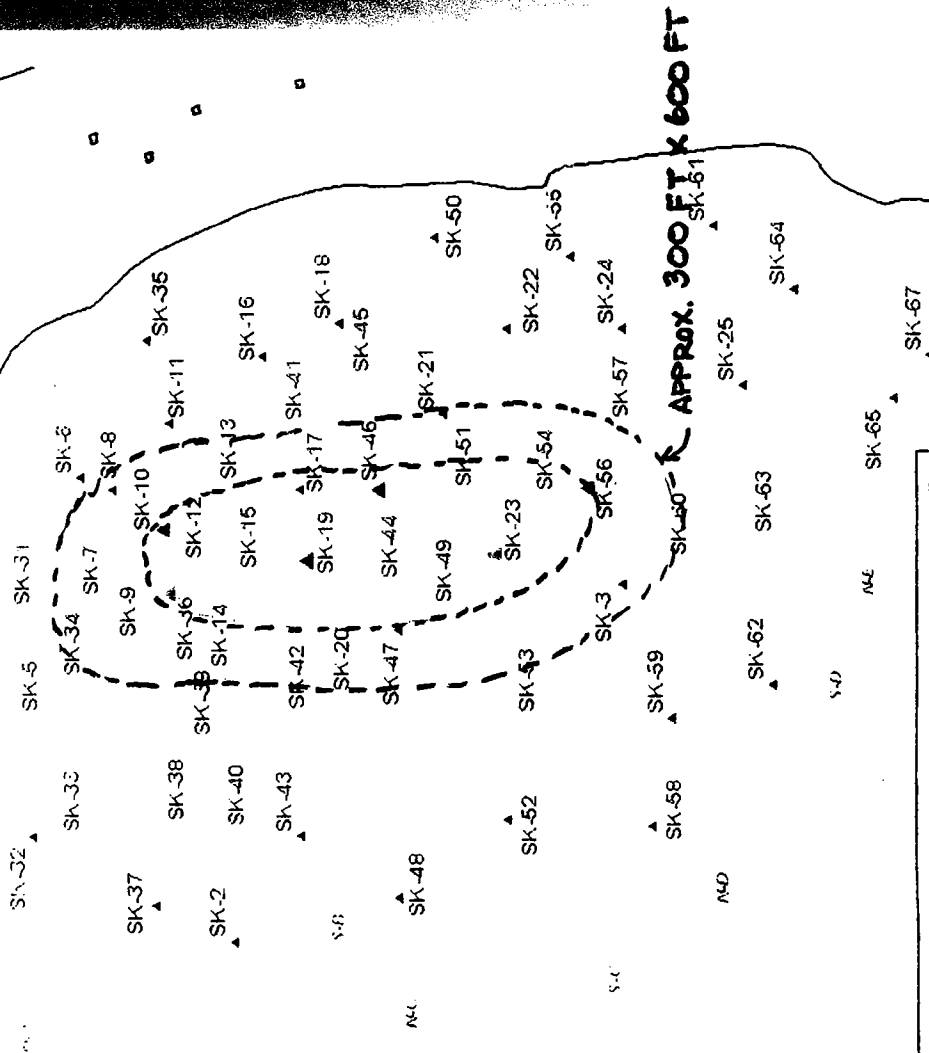
COMMENTS ON PROPOSED PLAN FOR FORMER SKEET RANGE (IR SITE 29) ALAMEDA POINT, CALIFORNIA

1. What has been the total dollar expenditure made by the Navy to date in investigations, sampling, and conducting probabilistic risk assessments at the Skeet Range IR Site 29? From the information presented by Mr. Michael Pound at the RAB Meeting on March 5, 2003, it appears that the area of the skeet range containing lead shot densities in the range of 11 to 50 shots per liter of sediment is approximately 300 ft by 600 ft. The estimated sedimentation rate at the site is 1 cm per year. In 30 years, the deposition of sediment would be approximately 1 ft (30 cm \approx 1 ft). Thus, most of the lead shot should be located in the top foot of sediment. This represents about 6,000 cu yds of sediment. What would be the cost of scooping up and disposing of 6,000 cu yds of contaminated sediment? I suspect that it might be less than what the Navy has already spent trying to demonstrate that no action is necessary.
2. In performing the environmental risk assessment, the Navy evaluated the effect on two types of diving birds (scaups and surf scoters). The technical complexity of the binomial probabilistic risk assessment employed is indeed mind boggling. The credibility of the results is fraught with uncertainty because of the large number of assumptions which are used as inputs. One factor used is the 'Site Utilization Factor' (SUF), or the fraction of the time the birds would be feeding at the former skeet range. From Mr. Pound's presentation, an SUF of 0.10 apparently was used. If it is acceptable to leave this material in place, there could be any number of other former skeet ranges around the bay and the affected birds could be ingesting lead shot at each of those locations when they aren't foraging at Alameda. An example would be the Chevron-Exxon gun club near Pt. Molate in Richmond. Therefore, the conclusion that "96% of the time, less than 1 in 1,000 birds" would be at risk may underestimate the cumulative impact of allowing these types of untreated sediments to remain in place.
3. One bottom feeding fish present in the waters offshore at Alameda is the sturgeon. These fish are very long-lived. Have you evaluated how much lead might be ingested by sturgeon over a 50-60 year period and what the human health risk would be of humans eating such fish or their roe?

**Lead Shot Density (shots/liter)
from 0-5 cm Depth
in 2-4 mm Sieve**

Legend
1996 Grab Sampling
(Transects)
Lead Shot Density

0
1 - 10
11 - 30
31 - 50
51 - 115



Attachment D

List of Attendees, Proposed Plan Public Meeting, March 7, 2005

Sign-In Sheet Public Meeting for Former Skeet Range (Site 29), Alameda Point, California – March 7, 2005

Name Resident or Affiliation	Address (Optional)	How Did you Hear About this Meeting? (✓)					Other (Please list)
		Mailer	Notice in the Alameda Journal	Notice in the Oakland Tribune	Word of Mouth		
Name: <i>Christine Jean Darnell</i>	Street: 135 Main St. Ste 1800 City, State and Zip: SF, CA 94105						Navy Contractor
Name: <i>Marcia Liao</i>	Street: 700 Heinz Ave. City, State and Zip: Berkeley, CA						DTSC
Name: <i>Thomas Macchiarella</i>	Street: City, State and Zip: Navy						Navy
Name: <i>July C. Huang</i>	Street: 1515 CLAY ST. ST. 1400 City, State and Zip: OAKLAND, CA 94612						Water Board
Name: <i>Jennifer Holder</i>	Street: 1135 Eugenia Pl City, State and Zip: Capitola, CA 93013						Navy consultant
Name: <i>Merv R. Rippe</i>	Street: City, State and Zip: USEPA						EPA
Name: <i>Peter Russell</i>	Street: 440 Nova Action Way City, State and Zip: SAN RAFAEL, CA 94903						ARRA Advisor
Name: <i>DAT LYNCH</i>	Street: 305 SPENCOS C City, State and Zip: ALAMEDA, CA						
Name: <i>Damon Norton</i>	Street: 1230 Columbia St. #100 City, State and Zip: San Rafael, CA 94131						Navy

[illegible]

Attachment E

Public Notices



NOTICE OF PROPOSED PLAN AND PUBLIC COMMENT PERIOD



Proposal of No Further Action at Former Skeet Range Alameda Point, California

The U.S. Navy, in coordination with state and environmental regulatory agencies, encourages the public to comment on its Proposed Plan for no further action at the former skeet range, identified as Installation Restoration (IR) Site 29 at the former Alameda Naval Air Station, now referred to as Alameda Point, in Alameda, California.

The former skeet range is located on the northwestern corner of Alameda Point. The site was used by the Navy as a skeet range and areas of offshore sediment contain lead shot, clay fragments, and polycyclic aromatic hydrocarbons (PAHs). The Proposed Plan provides a summary of investigations performed at the site including a remedial investigation and human health and ecological risk assessments. Based on data collected and analyzed for these investigations, the proposed determination is that no further environmental work is necessary because the potential for humans and/or animals to be exposed to offshore sediment was insignificant. This finding supports the eventual transfer and redevelopment of the offshore property to the Alameda Reuse and Redevelopment Authority.

PUBLIC COMMENT PERIOD

The Navy invites interested members of the public to review and comment on the Proposed Plan during the 30-day public comment period which is from February 15th to March 18th, 2005. Public comments must be submitted in writing and postmarked or e-mailed no later than March 18, 2005, or attend the public meeting on March 7, 2005. Please send all comments to: Mr. Thomas Macchiarella, BRAC Environmental Coordinator, Program management Office West, 1230 Columbia Street, Suite 1100, San Diego, California 92101, Thomas.macchiarella@navy.mil, (619) 532-0907, fax (619) 532-0940.

PUBLIC MEETING

The Navy will host a public meeting to discuss the Proposed Plan, answer questions and accept public comments.

Date: Monday, March 7, 2005

Time: 6:30 p.m. to 8:00 p.m.

Location: 950 West Mall Square, Building 1, Room 201, Alameda Point, CA

FOR MORE INFORMATION

A copy of the Proposed Plan, Remedial Investigation, Ecological and Human Health Risk Assessment and other site documents are available for review at:

Alameda Point
950 West Mall Square
Building 1
Alameda Point, California

Alameda Public Library
2200 A Central Avenue
Alameda, California

If you have any questions or wish to discuss the skeet range project, please contact Mr. Thomas Macchiarella, BRAC Environmental Coordinator, at (619) 532-0907, fax (619) 532-0940.

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Wednesday, February 16th

10am-1pm (limit 3 items)



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NOTICE OF PROPOSED PLAN AND PUBLIC COMMENT PERIOD

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Alameda Point, California**



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Alameda, California

If you have any questions or wish to discuss the skeet range project, please contact Mr. Thomas Macchiarella, BRAC Environmental Coordinator, at (619) 532-0907, fax (619) 532-0940.

Find us online at TheAlamedaJournal.com